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ABSTRACT

Current conditions in the labor market for trained education personnel are reviewed in this paper. It is based on data from a two year inquiry into American teacher education, a review of the existing literature on teacher education, and discussions with educators and contributors to the field. The paper is organized into three sections. The first section discusses the characteristics of supply, demand, and surplus in the present market for teachers and identifies some of the major variables that have been associated with the current labor market. The second section discusses the current and projected responses of the nation's schools, colleges, and departments of education to current imbalances in this market. The third section discusses the factors that influence students in their choices of teacher training programs and in their eventual behavior in the labor markets. (Author/JD)

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THE SUPPLY AND DEMAND FOR BEGINNING TEACHERS PAST, PRESENT, AND FUTURE

BY

FRANK MORRA

BEST COPY AVAILABLE

APRIL, 1977

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SP012 456

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THE SUPPLY AND DEMAND FOR BEGINNING TEACHERS PAST, PRESENT, AND FUTURE

This paper reviews the current conditions in the labor market for trained education personnel. It is based on data collected by the National Survey of the Preservice Preparation of Teachers, a two year inquiry into American teacher education sponsored by the National Center for Education Statistics, a review of the existing literature on teacher education, and discussions with knowledgeable educators and contributors to the field.

The paper is organized into three sections. The first section discusses the characteristics of supply, demand, and surplus in the present market for teachers and identifies some of the major variables that have been associated with the current labor market. The second section discusses the current and projected responses of the nation's schools, colleges, and departments of education to current imbalances in this market. The third section discusses the factors which influence students in their choices of teacher training programs and in their eventual benavior in the labor market.

The intent of this paper is to provide the reader with an overview of the labor market for trained education personnel and thus to stimulate discussion of the critical issues involved in the future adjustment of the balance between supply and demand.

SECTION ONE: THE LABOR MARKET FOR TRAINED EDUCATION PERSONNEL

This section presents data on the labor market for trained education personnel and discusses the major variables that affect the balance between supply and demand. The section is organized into four parts:

- A historical overview of conditions in this labor market
- A description of the basic variables associated with the supply of and demand for teachers
- An analysis of the general market conditions in 1976-1977
- A special analysis of the supply of trained teachers from minority backgrounds.

Historical Overview of the Market for Trained Education Personnel

The decades of the 1950's and 1960's were characterized by a general shortage of qualified teachers; this situation was produced by a variety of factors, including:

- A sharp increase in the school age population caused by the decision of many couples to have children that had been deferred during either World War II or the Korean Conflict.
- Changing residential patterns, in which a large number of families moved to suburban neighborhoods and created the need for many new schools. Many experienced teachers left the cities, leaving particularly high shortages in core urban areas.

- A faith in education as a route to social mobility coupled with a general economic prosperity which induced many persons to vote for bond issues and tax increases to pay for expanded educational activities.
- The relatively low pay scale of teachers coupled with a social tradition that married women did not work; this implied a high turnover of teachers as young women only taught for a few years, retiring from the labor force following marriage.

Prior to 1958, the Federal role in teacher preparation was minimal, respecting the tradition that education is the province of the states. A display of Russian aerospace technology and the effects of the factors listed above combined to encourage a more direct Federal role, through the National Defense Education Act (NDEA) of 1958. This legislation assisted teacher preparation using two approaches:

- Inservice training to upgrade the quality of current teachers in "defense-related" areas -- foreign language, mathematics, and science.
- Financial incentives to encourage students to train as teachers through the provision of low-interest loans with a "forgiveness" feature that would allow for students to pay for their education by service in teaching.

The basic thrusts of Federal involvement in teacher preparation from 1958 through 1964 were directly descended from the NDEA, involving: (a) categorical programs to upgrade the skills of inservice teachers in

areas deemed vital to the nation's interest, and (b) financial incentives to students. The legislation enacted during the period included:

YEAR	LAW	PROVISIONS RELATED TO TEACHER EDUCATION
1963	Mental Retardation Facilities and Community Mental Health Centers Construction Act	Contained funds for research and development in the area of teaching mentally retarded children; also included a few teacher education demonstration projects.
1963	Vocational Education Act	Included several demonstration projects for training vocational education teachers, as well as research and development in vocational education.
1964	Civil Rights Act	Contained provision for inservice training to improve the effectiveness of teachers dealing with desegregation.
1964	Amendments to NDEA	Extended inservice institutes to a wide variety of subject areas, including teachers of the disadvantaged.

Given the continued demands for more and more intensely prepared teachers in certain of the areas, the Federal government took a more active role. For example, there was a pronounced unmet demand for qualified teachers for inner city schools, and in 1965 the Federal government enacted the following legislation:

Year	Law	Provisions Related to Teacher Education
1965	Cooperative Research Act	Grants to institutions to develop more effective models of teacher education, as well as provide support of internships and traineeships.
1966	Elementary and Secondary Education Act	Title I: Support for training of teachers in disadvantaged areas. Title III: Training for teachers providing supplementary or innovative education. Title VI: Tra[illegible] teachers of the handicapped.

Federal involvement in teacher education crested with enactment of the Education Professions Development Act of 1967 that called for: (1) developing a base of information on current education manpower needs; (2) providing a broad range of high-quality training and retraining opportunities in response to these needs; (3) bringing new roles and specialty skills into the schools; and, (4) making training programs more responsive to the needs of the schools.

Fourteen programs developed from this Act, including: Trainers of Teacher Trainers (T.T.T.), Career Opportunities Program (C.O.P.), Urban/Rural School Development Program, Media Specialist Program, and School Personnel Utilization.

Thus, the Federal role had been expanded to provide direct support to the training of teachers, restricted only by the categorical description of the audience in which they would ultimately teach. The approach was successful in providing teachers for disadvantaged children; a study showed that Teacher Corps graduates remain in teaching and in education for the disadvantaged in significantly larger numbers than teachers trained in other programs.*

*White, Louise, statement in Hearings Before a Subcommittee of the Committee on Appropriations, House of Representatives, Ninety-third Congress, March 1974, p. 1009.

By 1970, the forces which had led to high demand for teachers had begun to abate: the birth rate had declined sharply and the surge of "war babies" had made its way through the early grades of public schools; social unrest and declining prosperity had shaken the public's faith in education to the point that school bond issues began to fail at the polls. At the same time, more persons were being trained as teachers than ever before. Thus, in 1970, the supply of teachers exceeded the immediate demand for their services.

The first Federal response to this surplus was the Office of Education's decision to curtail new teacher training programs and begin to contract existing ones. The Bureau of Educational Personnel Development, which administers the EPDA, gradually moved away from pre-service training and began to stress inservice education, especially of teachers working with handicapped, bilingual, and disadvantaged children.*

The Administration's funding requests began to increasingly rely on providing inservice education and service for disadvantaged persons as the primary justification for Federal education programs, as evidenced by significant shifts in emphasis in Teacher Corps, Urban/Rural School Development Programs, and the Career Opportunity Program. The strategy was one of general cutbacks with sustained funding in specific shortage or special interest areas.

The Education Amendments of 1974 continued these general trends. Several EPDA projects were transferred to other legislation: training of bilingual teachers, training teachers of the handicapped, and the Teacher

*The Education Professions 1971-72, Part I - The Need for Teachers in Our Schools and Colleges, Annual Report required by the Education Professions Development Act, U.S. Office of Education, 1972, p. 56.

Corps were placed under ESEA, the Higher Education Act of 1965, and the Education of the Handicapped Act; other categorical programs under the EPDA were consolidated by Title IV of the Amendments in one Special Project Act, including libraries, learning resources, educational innovation, and support. EPDA, once the cornerstone of Federal involvement in teacher education, was severely curtailed and lost its priority mandate.

By the mid-1970's, Federal education manpower policy began to evolve toward the two dominant themes in effect today:

First, the delivery of support of higher education is being channeled through the student rather than through direct grants to the institution. This has been generally implemented through new programs such as the Basic Opportunity Grants and the Student Loan Insurance Fund, and through continuation of existing programs such as the NDEA Loan Program, Veterans' Administration tuition support, and Social Security Dependents' educational benefits. The rationale for this approach stems from the expectation that the individual students will choose careers in areas with jobs (and thus in areas other than education), and that the institutions of higher education will rapidly modify their programs according to changes in student choice.

Second, the states are expected to assume the costs of redistribution and re-training of educational personnel. This was to be supported in part by funds from the proposed Special Revenue Sharing Program; however, since this program has not yet been passed, for now the states are left with the problems of redistribution and re-training with only the rather limited and reduced categorical assistance cited above.

Within these twin thrusts, little formal attention is given to the question of improving either the established systems of teacher training or the current mechanisms for matching supply and demand. The theory is that the free market will take its course -- fewer students will enter teacher training; departments will adjust their level of effort in response to decreased enrollment; and existing unemployed teachers will be retrained by the states. However, the efficient workings of the free market in teacher preparation are based on at least four key assumptions:

1. Undergraduates have a sufficiently detailed knowledge of the market for teachers that they can make judicious plans as much as four years in advance.

2. Undergraduates, regardless of skill levels, have the option of entering at least one educational program besides teacher education that has better prospects of employment.

3. The various basic grants, loans, etc., are sufficient to permit the individual to have a choice among the different types of institutions and programs.

4. SCDE's have enough flexibility to adjust to changing enrollments on a year-to-year basis.

The National Survey of the Preservice Preparation was commissioned by the National Center for Education Statistics to provide general information on the supply of teachers and to provide (among other things) data which would enable a closer investigation of these four assumptions.

The Process and Nautre of Teacher Supply

The Traditional Process

The bulk of the nation's beginning teachers (99.2%) stem from 1151 institutions that offer programs in undergraduate teacher preparation. The responsible unit may be a school, a college, or a department of education (SCDE). The structure of the program is largely determined by the State Education Agency which provides guidelines for "approved programs", generally containing the following documents:

- General Studies, in which the student obtains preparation in substantive areas outside the SCDE.
- Professional Studies, in the foundations and methodology of teaching.
- Clinical/Practical Experiences, where the student assumes the role of the teacher in an actual classroom setting.
- Support Services, including research, counseling, media, and materials.

Graduation from an "approved program" usually leads to certification to teach in the public schools within the state.

Recent Trends in Certification

Thirteen states have moved in the direction of certification on the basis of the assessment of competence as a teacher; such programs require a detailed description of the actual job of teaching and the

keying of teacher preparation to this description. Recent legal and legislative activity such as California's Ryan Act and the Supreme Court's decision in Griggs vs. Duke Power have given greater impetus for linking formal training to jobs in the public schools. Students intending to teach at the elementary level usually must declare a major in education, while students preparing for the secondary level generally major in one of the Arts or Sciences areas, taking only a minor or elective courses in education. This describes the majority of beginning teachers. However, variations to this general pattern may occur. The guiding philosophy of the institution or its limited size may dictate the prospective elementary teachers declare a major in a non-education subject area. (This is often the case at small liberal arts colleges.) It is possible to prepare for secondary teaching with a major in education in some of the larger institutions.

The Nature of Specialization

In addition, it is possible to prepare for a variety of specialties within these levels: persons may specialize in a particular form of classroom organization (e.g., the open classroom) or a particular audience (e.g., the handicapped, inner city, etc.); also, students may specialize in the various subjects (e.g., math, english, chemistry, etc.). This implies that the general supply of teachers is actually composed of a wide variety of specialties not readily interchangeable and requiring extensive retraining to facilitate job transfers. The market for teachers is, in actuality, a series of discrete sub-markets.

The Reserve Pool

The supply of teachers is also influenced by student choices to seek certificates and to engage in the search for a teaching position upon graduation. This group is composed of approximately one-quarter of the new graduates with certificates each year. This would include a number of persons who have expectations for work outside teaching but who took a certificate as an "insurance policy". Over the years, these "missing 28%" constitute a reserve pool of certified teachers who may enter the market for teachers as opportunities decline in other fields or inflation causes families to seek additional income. Thus, the supply of teachers can undergo considerable expansion under worsening economic conditions.

Opportunities for Retraining

Several states, recognizing that undergraduate work constitutes merely the entry level of preparation, require an internship period and further demonstrations of skills before permanent certification is granted. Many states and local districts provide for salary incentives to encourage practicing teachers to take additional courses, earn advanced degrees, attend summer institutes, or take part in local inservice education activities. Thus, there are also opportunities to alter the nature of the teacher supply after initial graduation through retraining at the graduate level.

The supply system for teachers has many routes of entry into the job market -- directly from colleges, from the reserve pool, or from within the profession through retraining.

The Mechanisms Governing Supply and Demand

The Traditional Mechanisms

The traditional determinants of teacher demand are: the size of the school age population, the enrollment rate, the teacher/pupil ratio, and the termination rate of present teachers. The first determinant of demand is a function of general societal and economic conditions. The second is controlled by compulsory attendance laws; the third and fourth are affected by school finance and personal choice.

Possible Intervening Variables

Two additional factors could have a significant effect on demand for teachers in the future:

- Increases in the rate of enrollment in pre-school other specialty programs -- which would stimulate demand for early childhood, special education, and bilingual teachers.

- Reform of school finance, which would remove some of the burden of paying for education at the local level from the property owner and would make more money available to the schools.

Current Supply and Demand Conditions

Current demand for teachers is low, due to a decrease in the birth rate, low turnover, and a less than robust economy. However, given the fragmented nature of the market for trained education personnel, there are specific sub-markets where demand is relatively high:

- Shortages exist in certain subject-areas including remedial mathematics, science, and remedial reading, as well as special education.
- Demand is high in industrial arts and vocational education, where qualified graduates are recruited by industrial and business training programs; at far higher salaries than those offered by average school districts.
- There are shortages of persons with skills in individualizing instruction, working with children from minority cultures, and school-community relations.
- Persons from minority groups are generally underrepresented in the population of teachers with reference to their incidence in the general population. Compliance with equality of opportunity guidelines has produced a demand for qualified blacks and Chicanos; on the other hand, the closing of schools in ghetto areas in the North and the

elimination of dual school systems in the South has displaced many blacks from teaching positions.

- Finally, there is considered to be a shortage of male teachers at the elementary level and bilingual teachers at all levels.*

Historically, demand is now considered to be low. The variables governing demand are dependent on the larger population -- chiefly the birth rate, the economy, and desire for more specialized education -- and are forces which may dramatically change demand in the near future.

The General Market Conditions for Trained Education Personnel: 1976-1977

Preservice teacher training is currently undergoing a period of stress: low demand for beginning teachers has caused major declines in enrollment in training programs and has caused acute fiscal problems in many institutions. Preservice teacher education reached a peak in 1973 when 322,000 persons received initial teacher certificates; by 1976, this had contracted by one-third, when 227,000 persons graduated with certificates.

*Source: General Accounting Office, Supply and Demand Conditions for Teachers and Implications for Federal Programs, Report B-164031 (Washington, D.C.: Government Printing Office), 1974.

Sources of Study Data

The National Survey of the Preservice Preparation of Teachers (NSPPT) collected data on the market for beginning teachers in 1976-1977. This study addressed a nationwide probability sample of 240 of the 1151 institutions which prepare the bulk of the country's teachers. Both public (N=424) and private (N=727) institutions of three types were studied:

Universities (N=150). Institutions which offer extensive program offerings in all subject areas at the undergraduate and graduate levels and preparation in medicine and law.

Comprehensive Colleges (N=438). Institutions which offer a wide variety of programs at both the undergraduate and graduate levels with no preparation in medicine or law. (Note: the bulk of these institutions were "teachers colleges" which expanded greatly during the period 1950-1970.)

Liberal Arts (N=563). Institutions which offer training primarily at the undergraduate level with the occasional graduate program not exceeding the masters level.

General Supply and Demand for Teachers

Chart 1 (following page) shows the aggregate supply and demand for teachers from 1961 through 1976. The data on demand were provided by Dr. Mark Borinsky of the National Center for Education Statistics and include demand in both public and private schools. The line representing career choices of students has been produced using data from the National

Education Association (prior to 1972) and the NSPPT estimates obtained from faculty students and administrators (after 1972).

> In the aggregate, the supply of beginning teachers will exceed demand by approximately 100,000 persons. This excess is half that observed in the most serious surplus year (1973). The size of the present surplus is reduced somewhat when the career choices of graduates are considered: under these conditions, approximately 75,000 persons will be frustrated in their search for work during AY 1976-1977.

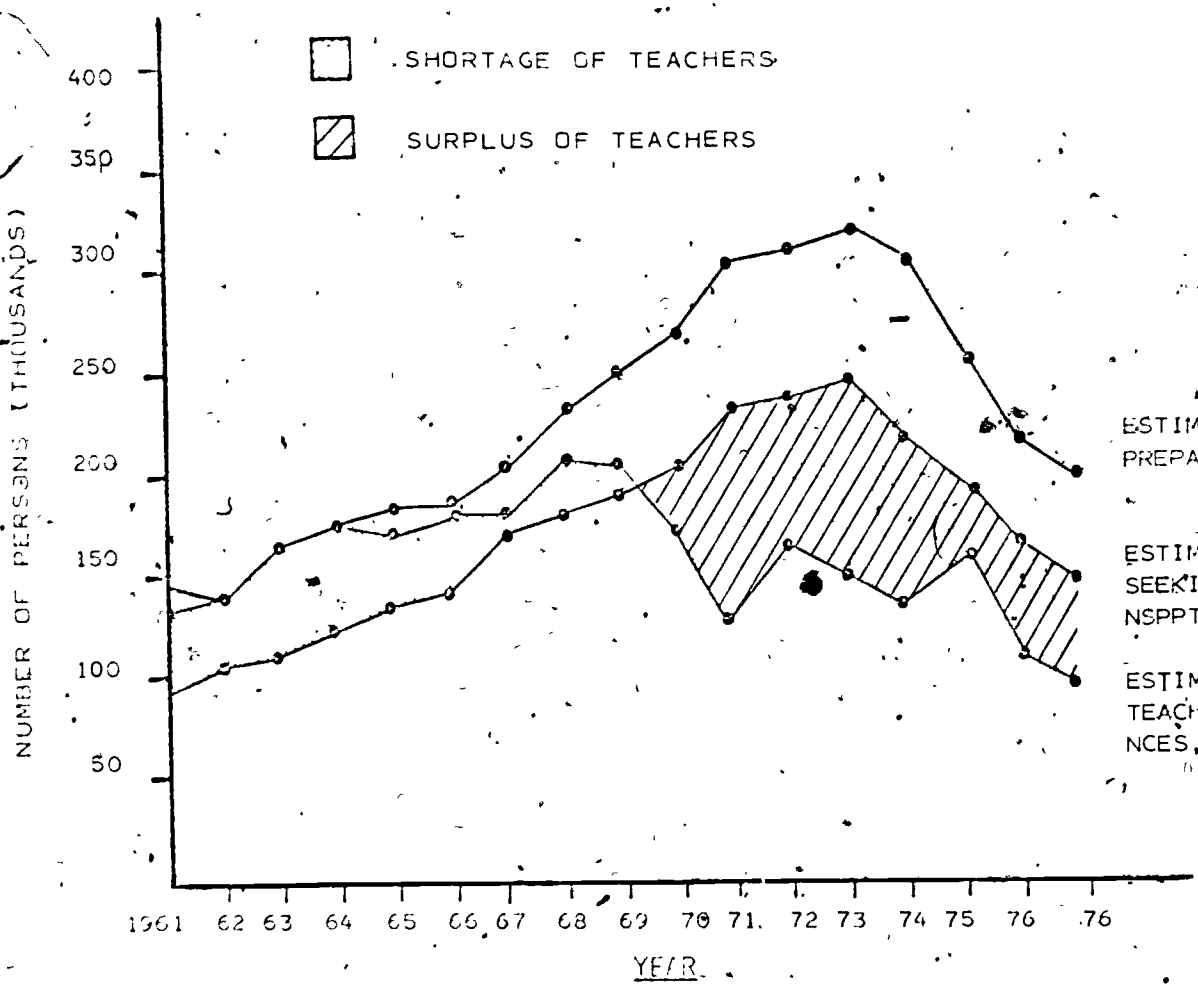
Need for a Review of Policy Based on Previous Data

The data in Chart 1 show that the forces of the labor market have finally begun to have their effect. Supply is moving toward demand, albeit the adjustment has been slow, inefficient, and costly to individual students desiring work as a teacher. This data would indicate that earlier forecasts of drastic surpluses and persistent oversupply of teachers are in error. For example, in 1972, the Center for Priority Analysis of the National Planning Association wrote:

> For the period 1971 to 1979...there will be 3,201,711 graduates (with teaching certificates)... This would represent over 2,000,000 graduates prepared to teach in excess of the need ...*

*Kotz, A., Report on: Quantitative Information on Teacher Training (Washington: National Planning Association), 1972, III, p. 2.

CHART 1. SUPPLY AND DEMAND FOR BEGINNING TEACHERS. AGGREGATE UNITED STATES. 1961-1976



A SERIOUS IMBALANCE STILL EXISTS BETWEEN SUPPLY AND DEMAND FOR TEACHERS. ALTHOUGH THE MARKET SEEMS TO BE REDUCING THE OVERSUPPLY, ALMOST 75000 PERSONS WHO ARE QUALIFIED TO TEACH WILL NOT FIND JOBS. OF THESE, ALMOST ONE-FOURTH WILL NOT EVEN ATTEMPT TO SEEK WORK.

NOTE: SUPPLY DATA FOR 1961-1971 SUPPLIED BY DR. WILLIAM GRAYBEAL OF THE RESEARCH DIVISION OF THE NATIONAL EDUCATION ASSOCIATION

Chart 2 shows the relationship between early projects (which employed a straight-line projection model) and estimates obtained by the NSPPT. These early studies represent the best projections of their time, based on limited existing information. The intent of this discussion is not to criticize or second-guess the researchers of 1972. However, considerable public policy was formulated under the assumptions of massive oversupply of teachers -- particularly in the Federal area where support for preservice teacher training was sharply curtailed.

> Since the supply of teachers, instead of increasing by 20% (as predicted in 1972) has, in fact, dropped by 35% in the past five years, many of the policy decisions which were made on the basis of early crisis predictions should be re-evaluated in the light of this new data.

The Detailed Market Conditions for Trained Educational Personnel: 1976-1977

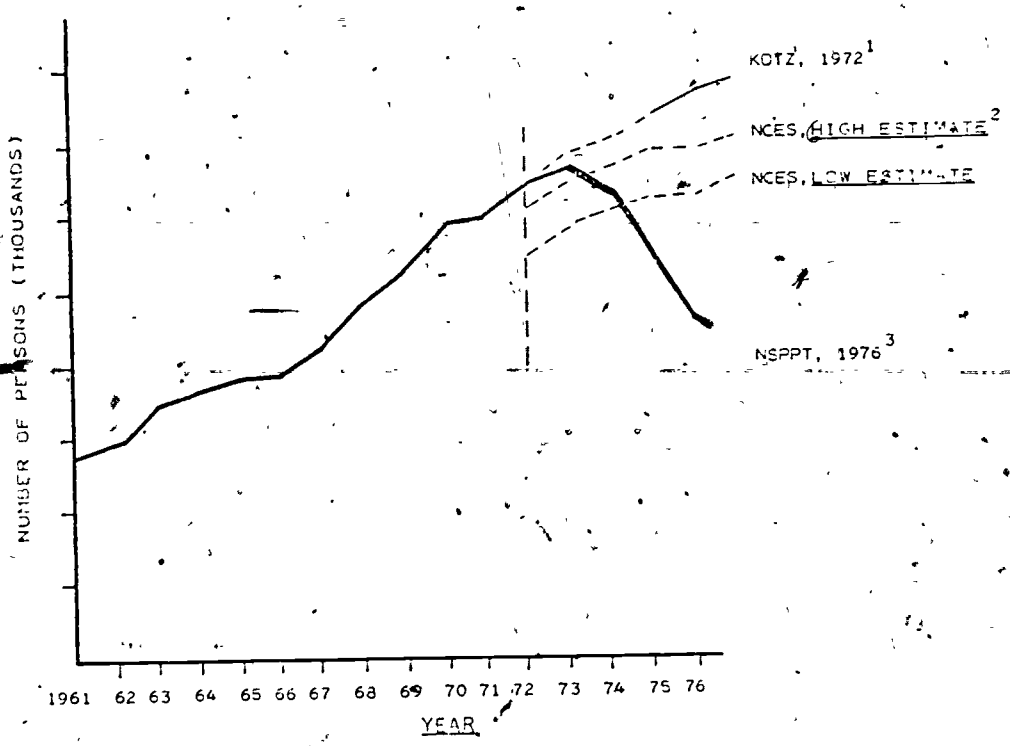
While informative for general policy purposes, an aggregate analysis of teacher supply and demand leaves many important questions unanswered. For this, one needs to take a more detailed look. The following section will provide this by examining teacher supply by field of training, by type of institution, by ethnic background, and by alternate forms of training.

Supply by Field of Training

Chart 3 (following page) shows the supply of beginning teachers, presented by major field of training. The following method has been used to group individuals into the fields:

- Elementary Education, including general elementary, early childhood, preschool, and/or kindergarten.
- Secondary Education, including all subject specialties such as math, science, English, social studies, etc., and specialization in junior high school or middle school teaching.

CHART 2. ACTUAL VS. PROJECTED SUPPLY OF TEACHERS



PRIOR PROJECTIONS OF MASSIVE INCREASES IN THE SUPPLY OF TEACHERS HAVE PROVED TO BE INACCURATE

1. SOURCE: KOZE, A. ET.AL. QUANTITATIVE INFORMATION ON TEACHER TRAINING NATIONAL PLANNING ASSOCIATION, CENTER FOR PRIORITY ANALYSIS. PREPARED FOR DHEW/USOE/NCES APRIL 1972

2. SOURCE: U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE, NATIONAL CENTER FOR EDUCATION STATISTICS. PROJECTIONS OF EDUCATION STATISTICS TO 1984-1985 1975 EDITION: PROJECTIONS ARE BASED ON ACTUAL DATA FROM 1972

3. SOURCE: F. MORRA AND V. KUUSKRAA SUPPLY AND DEMAND FOR TEACHERS: REPORT #1 OF THE NATIONAL SURVEY OF THE PRESERVICE PREPARATION OF TEACHERS (WASHINGTON, D. C.: LEWIN & ASSOCIATES INC. 1977)

NOTE: THE NCES PROJECTS TRENDS IN EXISTING DATA. SUCH PROJECTIONS ASSUME NO CHANGES IN ENVIRONMENTAL CONDITIONS. FOR EXAMPLE, THE "HIGH" PROJECTION OF TEACHER SUPPLY IS BASED UPON THE ASSUMPTION THAT 30 PER CENT OF COLLEGE ENROLLMENT ENTERS TEACHER EDUCATION (AS WAS APPROXIMATELY THE CASE IN 1972). THE FACT THAT STUDENT DECISIONS TO ENTER TEACHER EDUCATION WOULD DROP SEVERELY THE FACE OF POOR EMPLOYMENT PROSPECTS, WAS NOT INCLUDED IN THE NCES PROJECTION MODEL.

- Special Education, including bilingual/bicultural, deaf, blind, speech correction, gifted and talented, mentally retarded, crippled and health impaired, learning disabilities, and social and emotionally disturbed.

- Subject Matter Specialists, including fine arts education (music, art, drama), physical education, driving and safety, and training aimed at producing curriculum specialists in reading, math, science, urban and rural specialists.

- Occupational and Vocational, including industrial arts, vocational and technical, business, commerce, and distributive education.

- School Support Personnel, including psychology, guidance counselors, and librarians.

The figures for AY 1972-1973 through AY 1974-1975 were obtained from counts of applications for certificates as made by deans and department chairpersons. Data for AY 1975-1976 are projections from a national probability sample of 3,600 students in their final year of teacher preparation.

In 1974, the General Accounting office reported the results of a survey of all State Departments of Education which indicated:

- A general excess of elementary and secondary teachers.

- A shortage of teachers in special education, industrial arts, mathematics, science, and trade and vocational subject areas.

The NSPPT data indicate that the net effect of market forces has been to reshape the supply of beginning teachers to more closely follow demand.

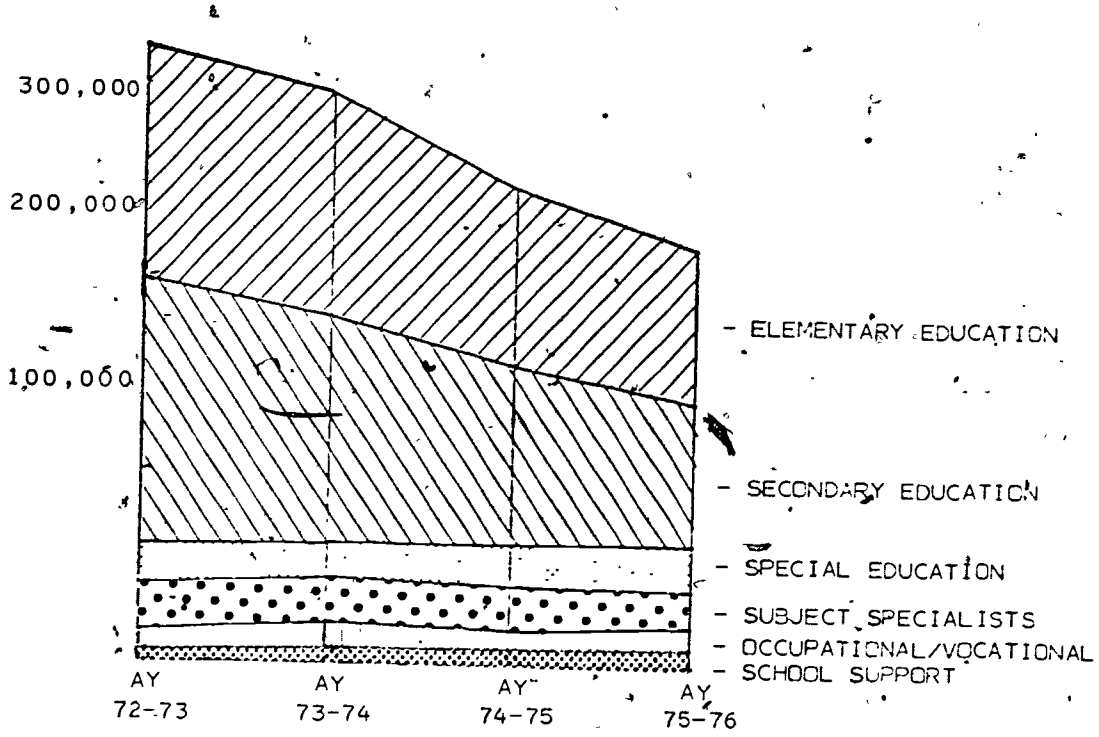
The major changes in the supply of teachers have occurred in the areas of elementary and secondary education -- the fields most frequently associated with oversupply. Chart 3 shows that elementary and secondary education have undergone considerable contraction over the past five years. Conversely, specialty areas such as occupational/vocational, special education, and school service have expanded.

Supply by Institutions

Charts 4 and 5 show the distribution of graduates with initial teaching certificates by control and type of institution.

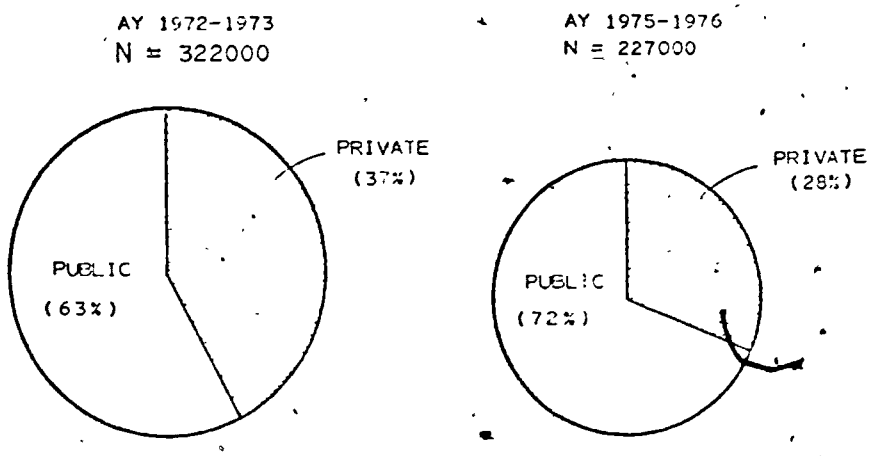
Teacher education has historically been concentrated in public institutions and, in particular, the comprehensive college, many of which are the direct descendants of the teachers colleges of the early Twentieth Century and the normal schools of the Nineteenth Century. Moreover, a considerable portion of teachers were prepared by the liberal arts institution. In AY 1972-1973 comprehensive colleges produced 61% and liberal arts 18% of the graduates with initial certificates. However, a variety of factors are directing new supply away from these historic institutional

CHART 3. SUPPLY OF BEGINNING TEACHERS BY AREA OF SPECIALIZATION



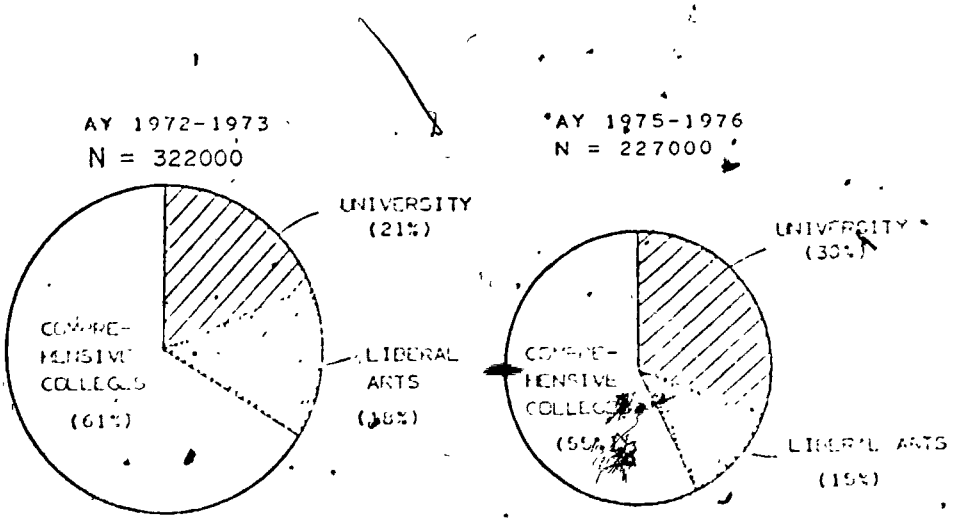
THE MAJOR CONTRACTION IN NEW TEACHER SUPPLY HAS TAKEN PLACE IN ELEMENTARY AND SECONDARY EDUCATION.

CHART 4. DISTRIBUTION OF GRADUATES WITH TEACHING CERTIFICATES BY CONTROL OF INSTITUTION AGGREGATE UNITED STATES



SINCE 1972-1973, PRIVATE INSTITUTIONS HAVE COME TO PRODUCE A SMALLER SHARE OF A DECREASING NUMBER OF TEACHERS.

CHART 5. DISTRIBUTION OF GRADUATES WITH TEACHING CERTIFICATES BY TYPE OF INSTITUTION. AGGREGATE UNITED STATES



SINCE 1972-1973, UNIVERSITIES HAVE INCREASED THEIR SHARE OF THE PRODUCTION OF NEW TEACHERS.

sources. The nation's 438 comprehensive colleges have experienced a large (34%) contraction over the past five years. In absolute number of graduates, the drop was from 191,000 in 1972-1973 to 124,000 in 1975-1976. Proportionally, the liberal arts institutions experienced similar declines. Thus, in AY 1975-76, the share of the supply emanating from comprehensive colleges has dropped to 55%, and that of liberal arts institutions to 15%.

> Universities were the only type of institution to experience growth in teacher training from AY 1972-1973 to AY 1975-1976, primarily by expanding their service training efforts in special education, school service personnel, and other high demand specialties. Due to their ability to maintain their enrollments in a period of general decline, universities were able to increase their share of the production of beginning teachers from 21% in 1972-1973 to 30% in 1975-1976.

Supply of Teachers from Minority Ethnic Backgrounds

The NSPPT survey of seniors found that approximately eleven percent* of the graduates with initial teaching certificates were from minority backgrounds. As shown in Chart 6, the largest portion were Blacks (7.5%); followed by Hispanics (1.8%), Asians (0.9%), and American Indians (0.5%).

Chart 7 shows the participation by persons from minority backgrounds in the six fields of study considered by the NSPPT. This data indicates that minority persons participate in average proportions in elementary and secondary education, tend to have higher than average

* 87.9% indicated "Caucasian" and 1.4% indicated "Other".

CHART 6.

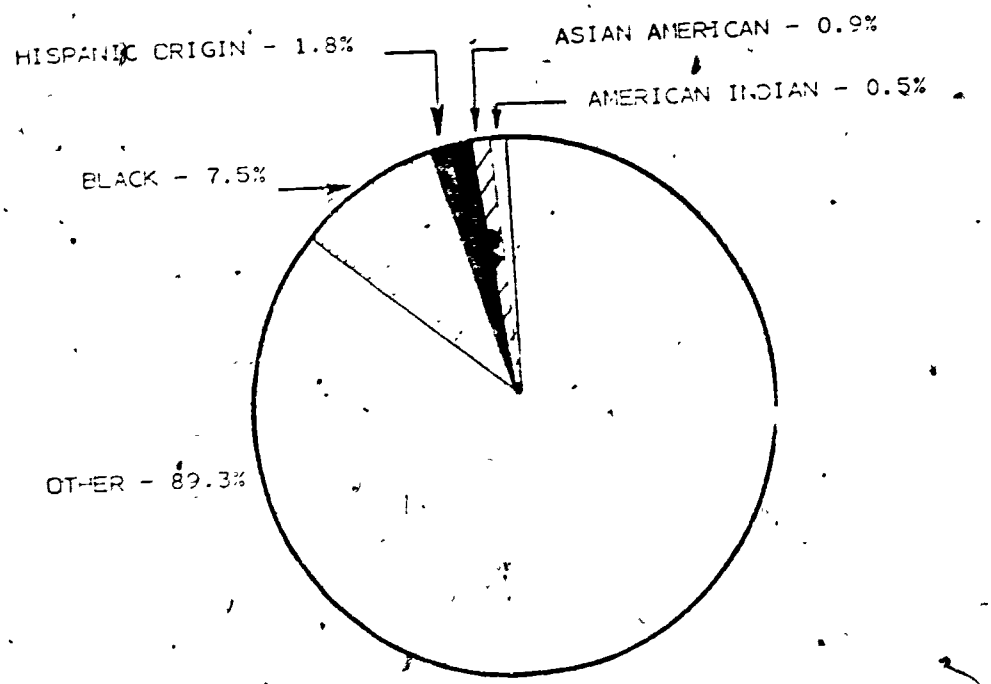
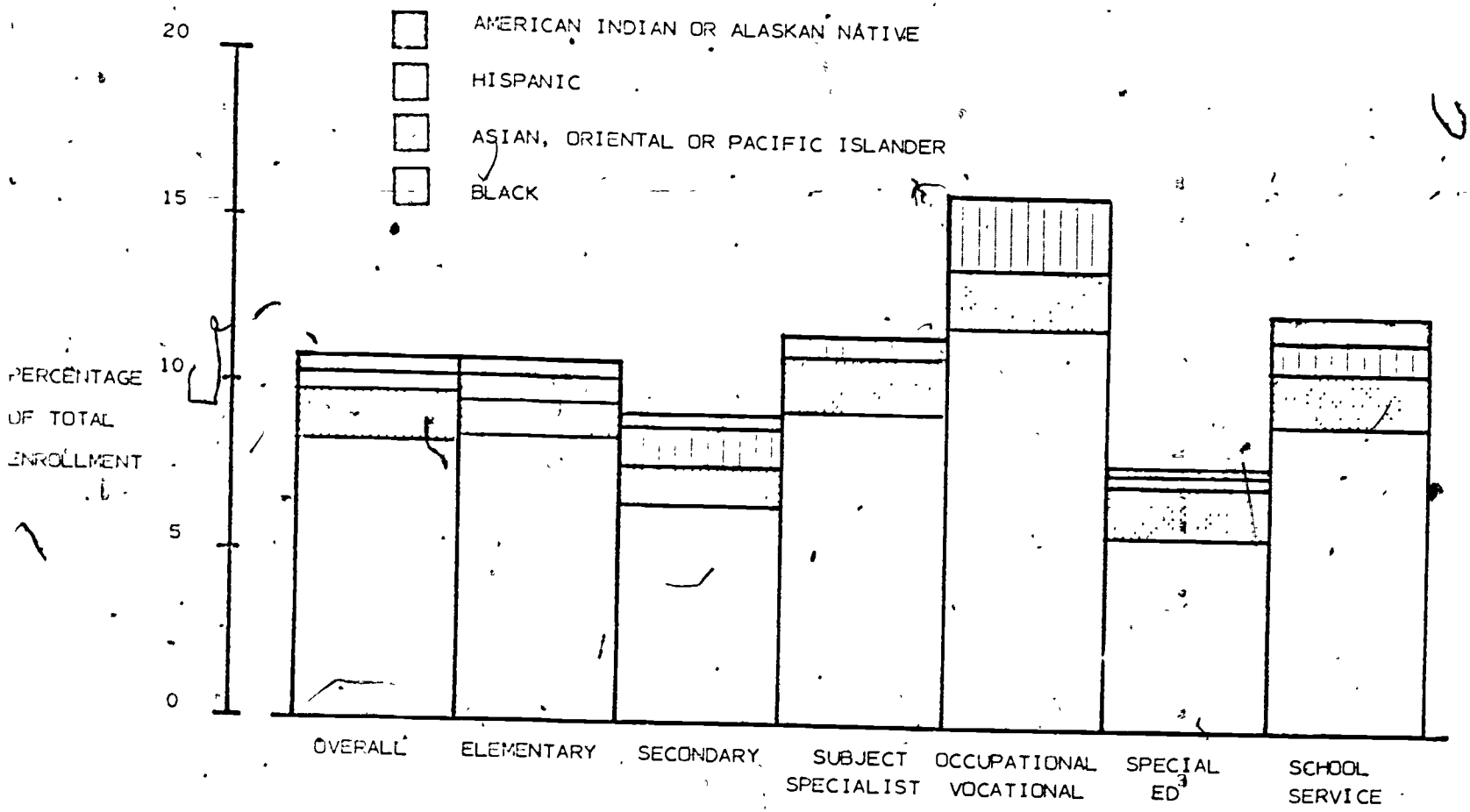

HISPANIC ORIGIN - 1.8%
ASIAN AMERICAN - 0.9%
AMERICAN INDIAN - 0.5%
BLACK - 7.5%
OTHER - 89.3%

CHART 7. DISTRIBUTION OF BEGINNING TEACHERS FROM MINORITY BACKGROUND BY FIELD OF SPECIALIZATION

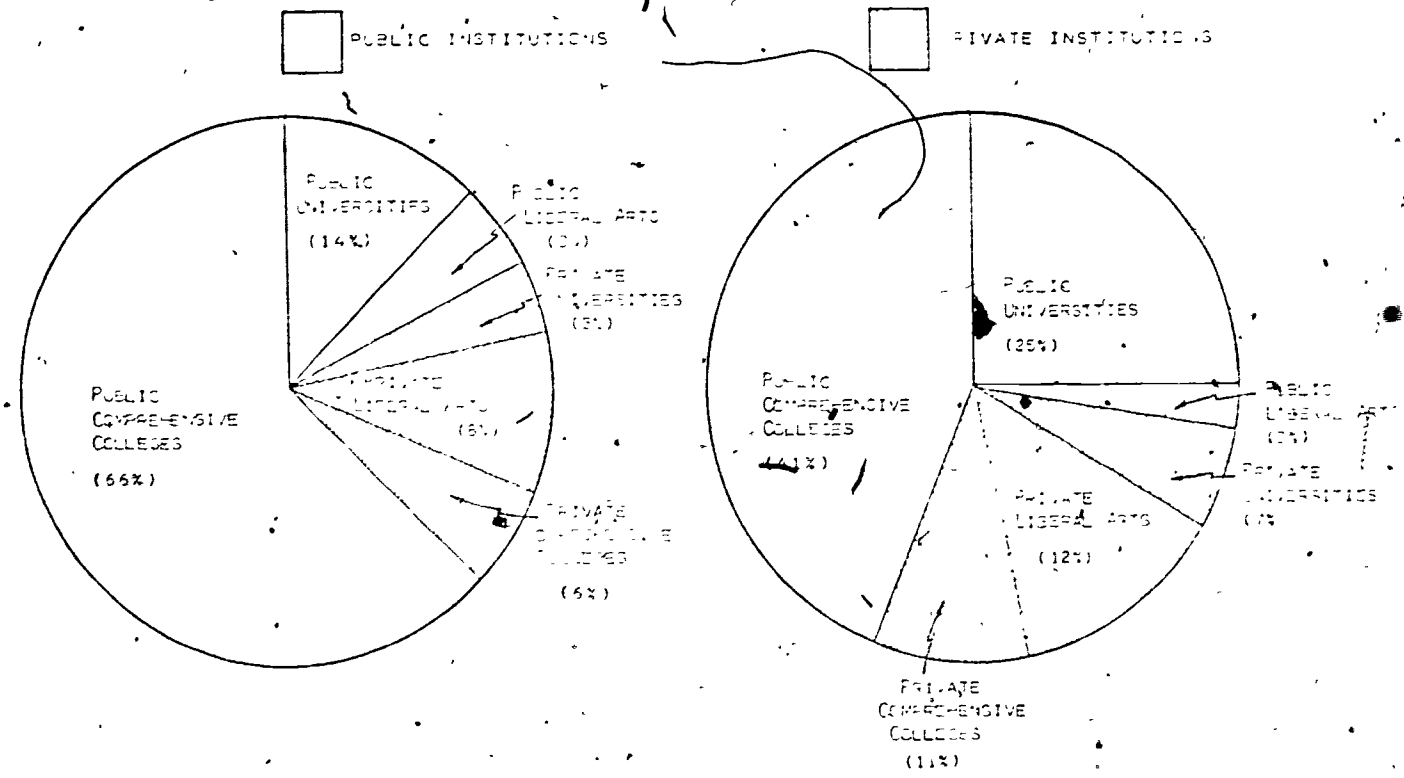
AGGREGATE UNITED STATES AY 1975-1976



MINORITIES HAVE ABOVE AVERAGE PARTICIPATION IN SCHOOL SERVICE AND OCCUPATIONAL/VOCATIONAL PROGRAMS. THEIR ABSENCE IS MOST SIGNIFICANTLY NOTED IN SPECIAL EDUCATION

CHART 8. DISTRIBUTION OF MINORITY AND NON-MINORITY BEGINNING TEACHERS ACROSS INSTITUTION TYPES

AGGREGATE UNITED STATES AY 1975-1976



MINORITY GRADUATES WITH CERTIFICATES TO TEACH

N = 27500

NON-MINORITY GRADUATES WITH CERTIFICATION TO TEACH

N = 199000

MINORITY TEACHER CANDIDATES ARE HIGHLY CONCENTRATED IN PUBLIC COMPREHENSIVE COLLEGES, UNDER-REPRESENTED IN UNIVERSITIES AND PRIVATE SCHOOLS.

participation in the fields of occupational/vocational education (16%) and school service (12.5%), and have lower than average participation in special education (8%).

Chart 8 shows the distribution of minority and non-minority graduates by type and control of institution. The data indicate that minorities are concentrated in public comprehensive colleges; conversely, non-minority persons have a much greater rate of enrollment in private institutions (30% vs 17%). A similar difference exists between the groups with respect to participation in university programs; thirty-two percent of the non-minority persons came from universities versus seventeen percent of the minorities.

In several states (e.g., Texas, Louisiana, Mississippi, North Carolina and Alabama), many public comprehensive colleges represent the remnants of a previously segregated higher education system. Thus, the concentration of minority persons in these institutions may be due to the combination of the low cost of education in public comprehensive colleges and historical precedent.

As shown in the following table, comprehensive colleges have the lowest mean tuition and fees of the six types of institutions which were studied.

TABLE 1

Tuition and Fees by Type and Control of Institution. Data are weighted national estimates based on a nationwide sample of 240 institutions. Fall; 1975.

Control of Institution	Type of Institution			
	All Types Combined	University	Comprehensive College	Liberal Arts
Overall	$ 887	$ 971	$ 651	$ 1584
Public	507	539	478	691
Private	1848	2615	1415	1808

The concentration of minorities in public comprehensive colleges may result from historical precedent, geographical location, and financial need rather than any nationwide pattern of discrimination.

Supply of Teacners With Experience in Alternative Forms of Classroom Teaching

During the past ten years, schools have adopted a variety of methods of classroom organization which represent alternatives to the traditional "self-contained" classroom in which one teacher interacts with a fixed group of twenty-to-thirty children. Among these alternatives are:

- The "open-classroom", modeled after experiments in British education and widely publicized by John Holt.

- The "team teaching" model which originated at Teachers College, Columbia University.
- The "alternative school" model which had its beginnings in the writings of A. S. Neill and received extensive attention in the late 1960's and early 1970's.

Although the financial exigencies of the mid-1970's have muted the once widespread discussion of these alternative forms of classroom organization, the NSPPT found interest on the part of educational decision-makers* in an assessment of the supply of persons with skills in each of the above areas.

Accordingly, persons in their final year of teacher preparation were asked to indicate whether they had received training in each of these areas. These results are presented in Tables 2, 3 and 4. The data show that training in the three areas of alternative classroom organization are fairly evenly distributed over public and private institutions: the incidence of such training does not differ markedly from the overall percentage of graduates from public (72%), private (28%), universities (30%), comprehensive colleges (55%), or liberal arts colleges (15%).

- Team Teaching is the most frequently mentioned form of alternative classroom organization. Approximately 100,000 persons constituting 44% of the new graduates are estimated to have received some form of training in team teaching.
- Open Classroom Instruction skills were reported by slightly more than one third of the graduates. It is estimated that 82,000 persons or 36.4% of the new graduates will enter the labor-market with experience in open education.

*NSPPT, The Data Needs of Educational Decision-Makers. (Washington, D.C.: Lewin and Associates, Inc.), 1975.

TABLE 2

NUMBER AND PERCENT OF TEACHERS TRAINED IN OPEN CLASSROOM INSTRUCTION BY TYPE AND CONTROL OF INSTITUTIONS. DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. FALL 1975.

	Number of Persons Trained in Open Clasrm	Percent of Total Persons Trained in Open Clasrm	Total Number of Persons Trained as Teachers	Percent of Total Trained as Teachers Who Were Trained in Open Classroom
All Institutions Combined	82,395	100.0	226,500	36.4
Public Institutions	59,233	71.9	161,375	36.7
Private Institutions	23,162	28.1	65,125	35.6
Universities	26,165	31.8	69,003	38.0
Public	19,998	24.3	54,027	37.0
Private	6,167	7.5	14,976	41.2
Comprehensive Colleges	43,326	52.6	123,666	35.0
Public	35,790	43.4	100,330	35.7
Private	7,536	9.1	23,336	32.3
Liberal Arts Colleges	12,904	15.7	33,831	38.1
Public	3,445	4.2	7,018	49.1
Private	9,459	11.5	26,813	35.2

TABLE 3

NUMBER AND PERCENT OF TEACHERS TRAINED IN TEAM TEACHING BY TYPE AND CONTROL OF INSTITUTIONS. DATA ARE WEIGHTED NATIONAL ESTIMATED BASED ON A PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. FALL 1975.

	Number of Persons Trained in Team Teaching	Percent of Total Persons Trained in Team Teaching	Total Number of Persons Trained as Teachers	Percent of Total Trained as Teachers Who Were Trained in Team Teaching
All Institutions Combined	100,467	100.0	226,500	44.4
Public Institutions	72,565	72.2	161,375	44.9
Private Institutions	27,902	27.8	65,125	42.9
Universities	30,886	30.7	69,003	44.8
Public	24,600	24.4	54,027	45.5
Private	6,286	6.3	14,976	42.0
Comprehensive Colleges	55,302	55.0	123,666	44.7
Public	45,188	45.0	100,330	45.0
Private	10,114	10.1	23,336	43.3
Liberal Arts Colleges	14,279	14.2	33,831	42.1
Public	2,777	2.8	7,018	39.6
Private	11,502	11.4	26,813	42.9

TABLE 4

NUMBER AND PERCENT OF TEACHERS TRAINED IN ALTERNATIVE SCHOOLS BY TYPE AND CONTROL OF INSTITUTIONS. DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. FALL 1975.

	AY 75-76 Number of Persons Trained in Altern Schools	Percent of Total Persons Trained in Altern Schools	AY 75-76 Total Number of Persons Trained as Teachers	Percent of Total Trained as Teachers Who Were Trained in Alternative Schools
All Institutions Combined	11,807	100.0	226,500	5.2
Public Institutions	7,502	63.5	161,375	4.6
Private Institutions	4,305	36.5	65,125	6.6
Universities	4,061	34.3	69,003	5.8
Public	2,523	21.3	54,027	4.7
Private	1,538	13.0	14,976	10.3
Comprehensive Colleges	5,381	45.6	123,666	4.4
Public	4,248	36.0	100,330	4.2
Private	1,133	9.6	23,336	4.9
Liberal Arts Colleges	2,365	20.0	33,831	7.0
Public	731	6.2	7,018	10.4
Private	1,634	13.8	26,813	6.1

- Alternative Schools received much attention during the late 1960's, but have not had a major impact on teacher education. Only 14,000 persons comprising 5.2% of the teacher trainees are estimated to have received training in alternative schools. These students appear to be concentrated in private universities and public liberal arts institutions; the incidence of alternative school experiences was over 10% in these institutions, approximately double the rate for the population.

The NSPPT data indicate that there is a relatively ample supply of persons trained in alternative forms of classroom teaching. Such training is more-or-less in proportion to the level of acceptance of each alternative. No particular type of institution was found to dominate in this type of preparation.

SECTION TWO: THE CURRENT AND PROJECTED RESPONSES OF INSTITUTIONS TO THE LABOR MARKET FOR TRAINED EDUCATION PERSONNEL

The relationship between supply and demand for new teachers, as illustrated in Chart 1, reflects the complex interaction of decentralized individual and institutional decision-making. Demand has a long-run component keyed to the birth rate; however, short-run peaks and valleys in demand are linked to the general economy and, in particular, to the impact of economic conditions on local education agencies. In addition, exogenous factors such as the judicial system can act in such a fashion as to create virtually instantaneous demands for teachers -- as recently illustrated in areas of special education and bilingual education.

Similarly, the supply of teachers has long-run components related to the aspirations of a large number of persons to perform a valuable social service related to working with children. Short-run factors can exert relatively large forces on the supply of teachers. Among these are the perceptions of students about their likelihood of obtaining employment as a teacher and the decisions of government agencies at the Federal and state level to encourage or discourage training. Concurrent with this is the planning and lead-time required by institutions in the alteration of programs in response to demand and the additional lag-time required to produce trained personnel.

Given these complexities of the market and its susceptibility to external shock, it is certain that the future is as likely to be characterized by imbalances between supply and demand as has been in the past. The existence of short-run imbalances is the price paid by society for free choice of higher education and training.

However, the NSPPT found that there is much room for improvement in reducing the magnitude of the imbalances between supply and demand. In particular, during the review of the literature and the discussion of the study with key decision-makers, the most frequently cited flaw was the lack of availability of current and accurate information about supply and demand conditions.

This section investigates the adjustment mechanisms which regulate the supply of trained education personnel within the institutions that are involved. The third section examines the role of student choice in the decision to prepare as a teacher. This section discusses three points:

- Current perceptions of the market for trained education personnel.
- Mechanisms used by institutions in the setting of program size.
- Projected responses of institutions within the next three years.

Current Institutional Perceptions of the Relationship Between Supply and Demand

The NSPPT asked a representative sample of 480 faculty, 240 deans and department chairpersons and over 560 heads of individual programs to give their perceptions of the relationship between supply and demand in the education professions. Respondents were asked to use a five-point Likert-type scale to indicate the supply conditions in several fields. The response categories were:

- Supply exceeds demand by more than 20%
- Supply exceeds demand by between 5% and 20%
- Supply and demand are within 5% of each other
- Demand exceeds supply by between 5% and 20%
- Demand exceeds supply by more than 20%

Respondents were asked to give their perceptions of market conditions for both traditional fields (i.e., elementary and secondary) and for fields identified by both the Congress and the G.A.O. as being important national priority areas. Among this latter group are: special education, occupational/vocational education, bilingual education, and the training of teachers to work in urban areas.

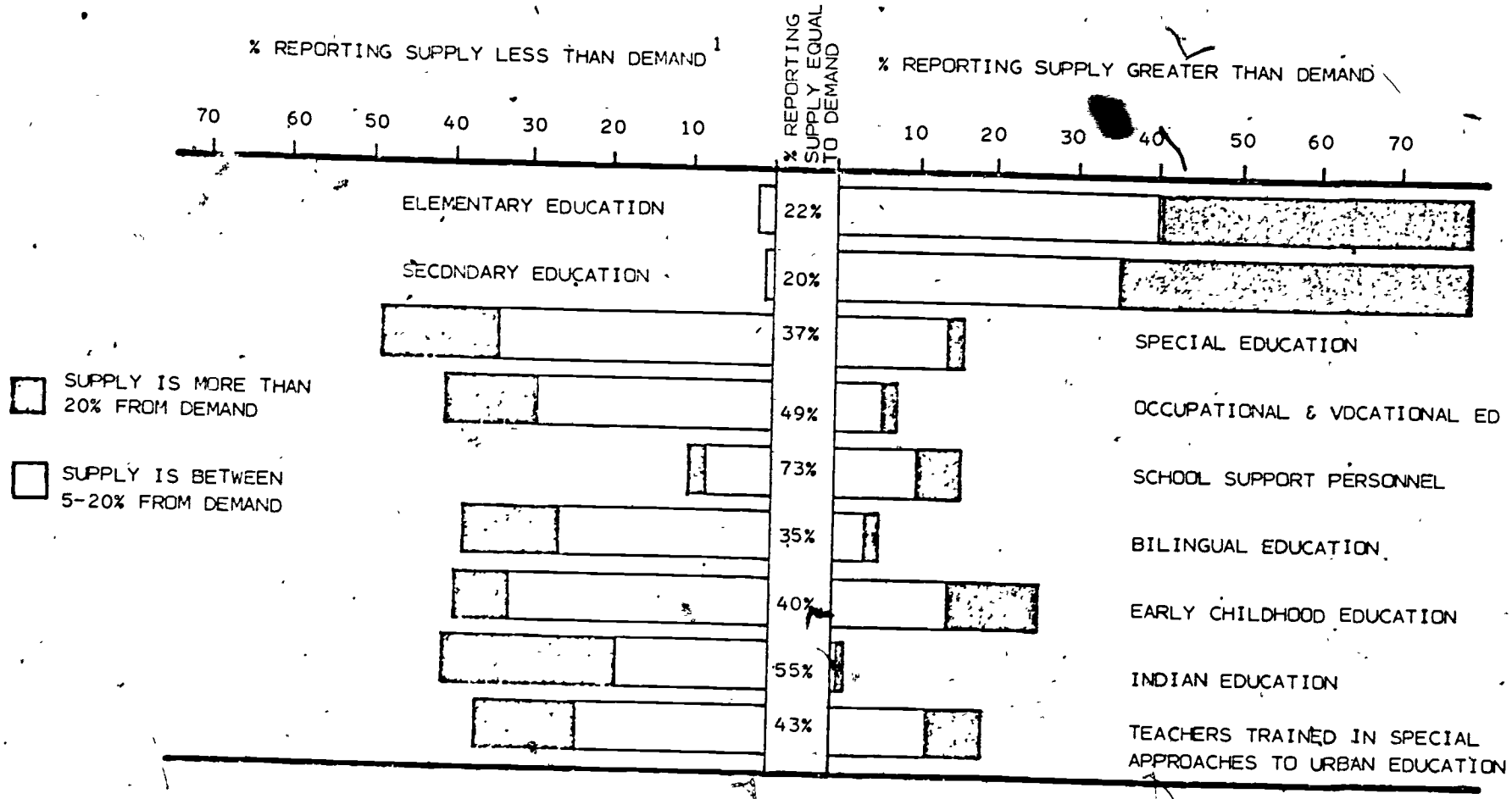
The results of their assessment of market conditions are displayed in Chart 9.

These results indicate that the respondents were in relative agreement with the literature on the supply and demand for education personnel:

- Elementary and secondary education are in considerable oversupply.
- Areas of specialized training remain in short supply.

Thus, the perceptions of teacher educators confirm that the market for trained education personnel is mixed: major surpluses exist in elementary and secondary education while shortages are found in specialized, high priority areas.

CHART 9. FACULTY PERCEPTIONS OF SUPPLY/DEMAND FOR BEGINNING TEACHERS
AGGREGATE UNITED STATES AY 1975-1976



FACULTY WERE ASKED TO ESTIMATE THE LABOR MARKET CONDITIONS FOR A VARIETY OF TEACHING SPECIALTIES. THE RESULTS INDICATE THAT THE TRADITIONAL FIELDS (ELEMENTARY, SECONDARY) ARE EXPERIENCING OVERSUPPLY. ON THE OTHER HAND, FIELDS IDENTIFIED BY THE CONGRESS AS IMPORTANT NATIONAL PRIORITY AREAS (PARTICULARLY SPECIAL ED AND BILINGUAL) HAVE SHORTAGES OF TEACHERS.

1 THE CHART PRESENTS THE PERCENTAGE OF FACULTY IN EACH OF FIVE RESPONSE CATEGORIES

A. SUPPLY MORE THAN 20% LESS THAN DEMAND (BLACK BARS ON LEFT)
B. SUPPLY WITHIN 5-20% OF DEMAND BUT BELOW DEMAND (WHITE BARS ON LEFT)
C. SUPPLY WITHIN + OR - 5% OF DEMAND (CENTER COLUMN)
D. SUPPLY WITHIN 5-20% OF DEMAND BUT ABOVE DEMAND (WHITE BARS ON RIGHT)
E. SUPPLY MORE THAN 20% ABOVE DEMAND (BLACK BARS ON RIGHT)

Mechanisms for the Adjustment of Supply to Demand

Charts 1, 2 and 3 (above) show that major adjustments in the supply of beginning teachers took place between 1973 and 1976 when the number of graduates with initial certificates dropped by about one-third. The NSPPT sought to study the nature of the mechanisms which regulate the supply of teachers; the study was designed to obtain a differentiated view of decision-making at the level of the individual teacher-preparation program. In particular, the dean or department chairperson who had overall responsibility for teacher education was asked to disseminate a separate questionnaire to each individual teacher-preparation program within the institution (e.g., elementary, secondary, special education, etc.) In this fashion, differences between the various types of programs could be studied. Among the items included was a request for information about the methods used in the determination of program size. Among the mechanisms studied were those suggested in the literature on program planning:

- Student Decisions: The traditional mechanism for setting program size has been enrollment or the reflection of student choice.

- Analytic: A number of authors have urged that program size be determined, in part, by an analytic approach based on either trends in the population of children or in the employment rates of graduates. Several states (e.g., Connecticut) have encouraged studies of children as a basis for planning training of special education programs. Recent court decisions affecting private technical/vocational schools have implications for traditional higher education with respect to the employment rates of recent graduates.

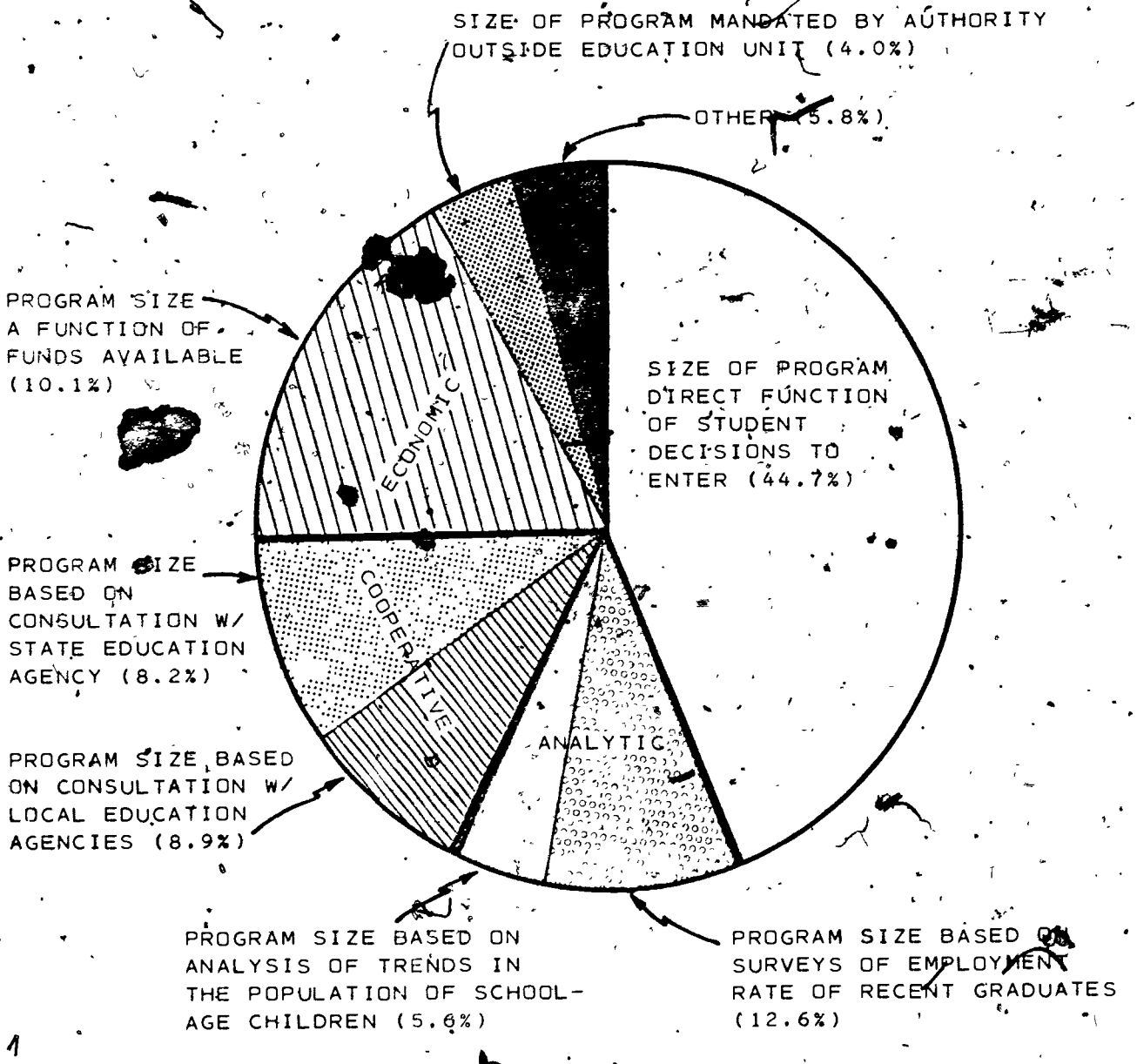
- Cooperative: A number of techniques have been proposed for cooperative planning at the state and local level for the adjustment of the supply of teachers. California's Ryan Act has set the tone for cooperative planning at the statewide level and several teacher professional organizations have called for cooperative training between local education agencies and colleges and universities.

- Economic: The fiscal crisis has required some institutions to contract their education units. Thus, as costs increase, fewer persons may be trained.

- Outside Authority: With the onset of the current teacher surplus, several states (most notably Utah) experimented with the concept of governing the number of persons that should participate in teacher education. Other states have used this approach, although less stringently with their specialized programs.

The results of this study are shown below in Chart 10. As indicated by this data, the choices of students are the major determinant of the size of the student supply. The size of almost half of the programs (44%) is regulated by student decisions to enter training. The influence of student choices is made even clearer when the number of students involved in each of these programs is considered. Chart 11 presents the number of graduates emanating from teacher education programs by field of training and by method of determining program size. The data indicate that the student's decisions are even more influential in the determination of program size than would be expected from Chart 10. In particular, 60% of the graduates came from programs whose size was determined by student decisions -- although these are 44% of the total programs.

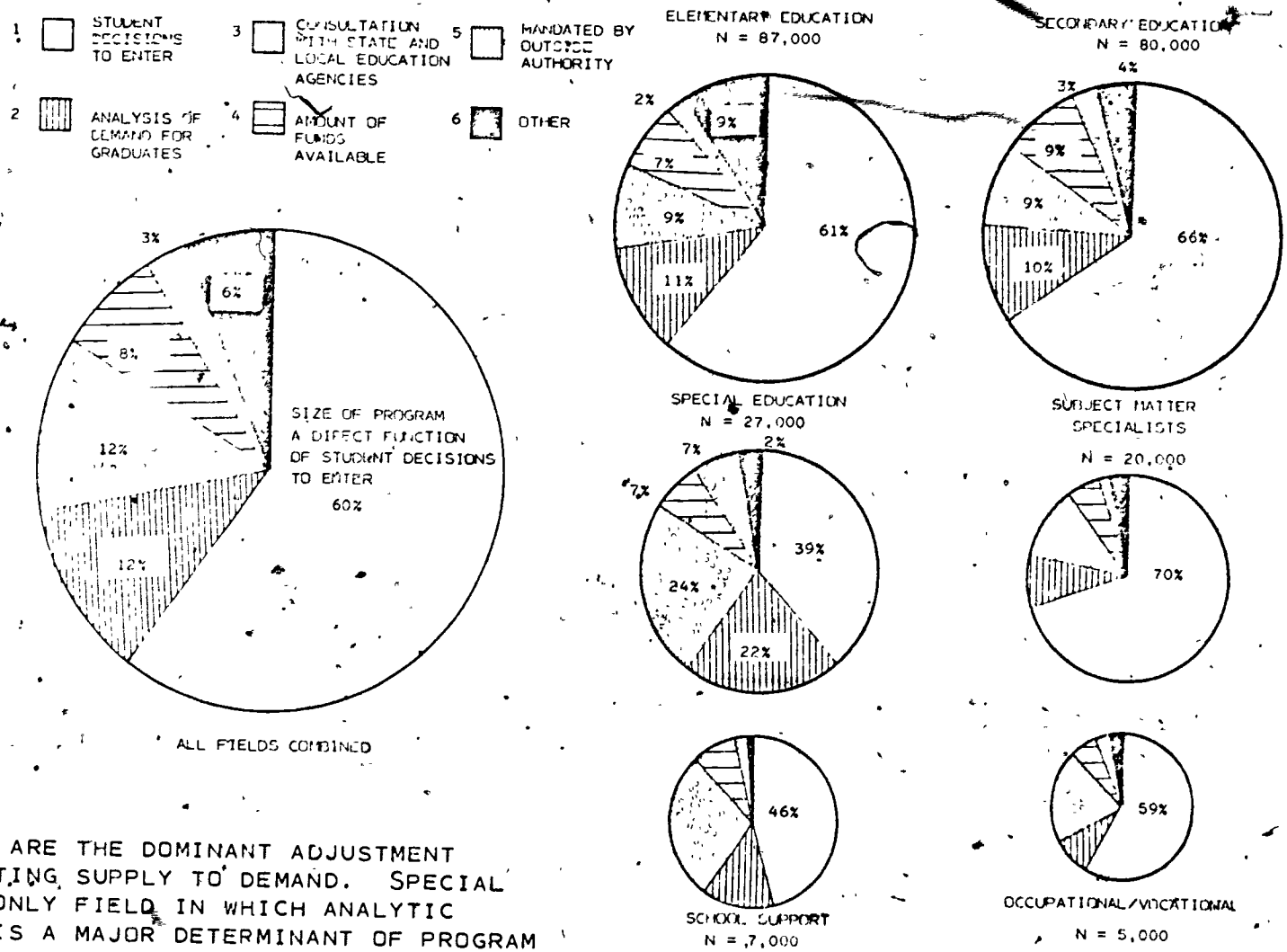
CHART 10. METHODS USED TO DETERMINE PROGRAM SIZE



STUDENT SELF SELECTION IS THE PRIMARY REGULATOR OF PROGRAM SIZE AND SUPPLY.

CHART 11. NUMBER OF GRADUATES FROM TEACHER EDUCATION PROGRAMS BY METHOD USED TO DETERMINE PROGRAM SIZE

AGGREGATE UNITED STATES AY 1975-1976



STUDENT DECISIONS ARE THE DOMINANT ADJUSTMENT MECHANISM IN RELATING SUPPLY TO DEMAND. SPECIAL EDUCATION IS THE ONLY FIELD IN WHICH ANALYTIC ADVANCE PLANNING IS A MAJOR DETERMINANT OF PROGRAM SIZE.

SOURCE: NSPPT INSTITUTIONAL PROGRAM DATA

Thus, the larger programs and the supply in the larger fields of training are heavily influenced by student decisions: 61% of the elementary education graduates and 66% of the secondary graduates came from programs which determined their size on the basis of student decisions to enter.

Conversely, planning and analysis is made a dominant regulator of supply in special education and the preparation of school support personnel, where less than half of the graduates came from student-determined programs.

Special education training is often keyed by law to the incidence of pupils with exceptionalities in the general population. Federal aid to such training through the Bureau of the Education of the Handicapped requires extensive cooperative planning and analysis of the population of school-age children. State education agencies also impose additional requirements for justification of training. Thus, only 39% of the special education graduates came from programs whose size was determined by student choice.

The training of school support personnel such as guidance counselors and school psychologists requires extensive clinical experience in a relatively sensitive setting. The circumstances necessary for these experiences are limited by cooperative arrangements with school districts. Thus, cooperative planning mechanisms play a large role in this training -- 24% of the school support graduates come from cooperatively planned programs as opposed to 12% of the entire group of graduates.

The major mechanism for the determination of program size -- and hence future teacher supply -- is the decision making process of the basic consumer, the student. Other approaches to regulating supply such as using an assessment of probable job opportunities, funding limitations, and legislative mandates emerge as more important in the specialty fields.

Future Trends in Teacher Education

The NSPPT sought to obtain the perception of deans and department chairpersons about the future trends of enrollment in teacher education. The respondents were asked to use a five point Likert-type scale with the following response alternatives:

- Enrollment will increase more than 20%
- Enrollment will increase between 5% and 20%
- Enrollment will remain within five percent of the current figure
- Enrollment will decrease between 5% and 20%
- Enrollment will decrease more than 20%

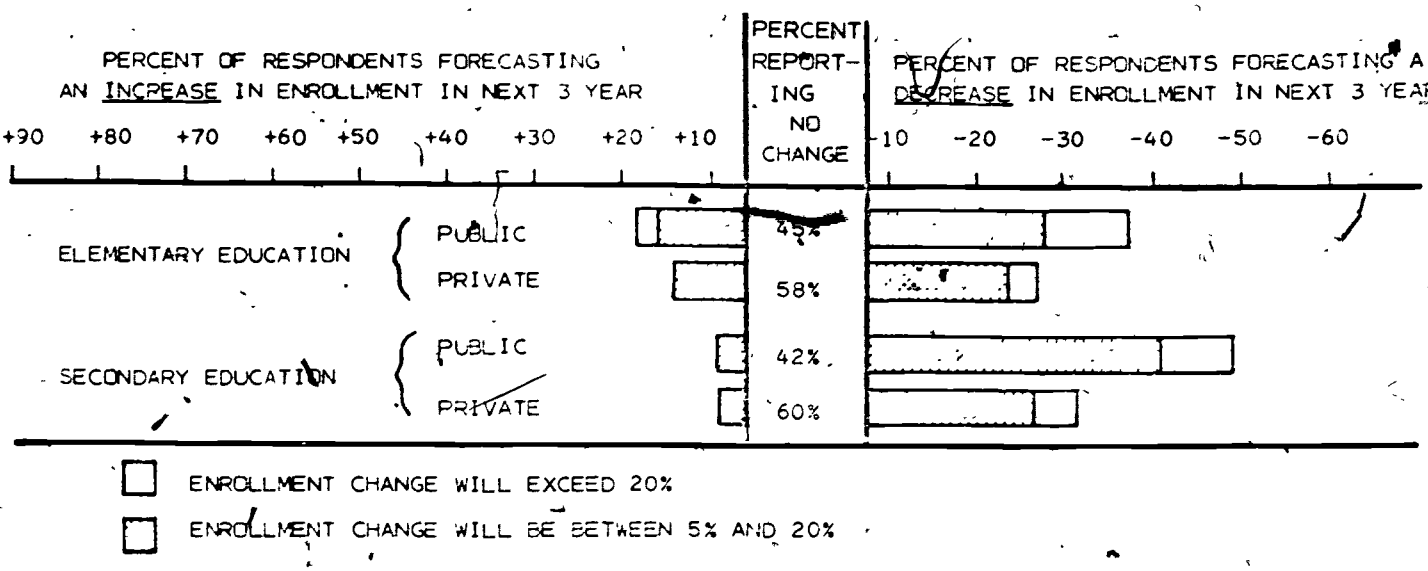
The results from this item are presented in Chart 12 below.

Deans and department chairpersons indicated that enrollment trends would reflect the current conditions of supply and demand as discussed above:

- Elementary and secondary education will continue to decline, most likely between five and twenty percent.
- Specialized fields of training would increase in size.

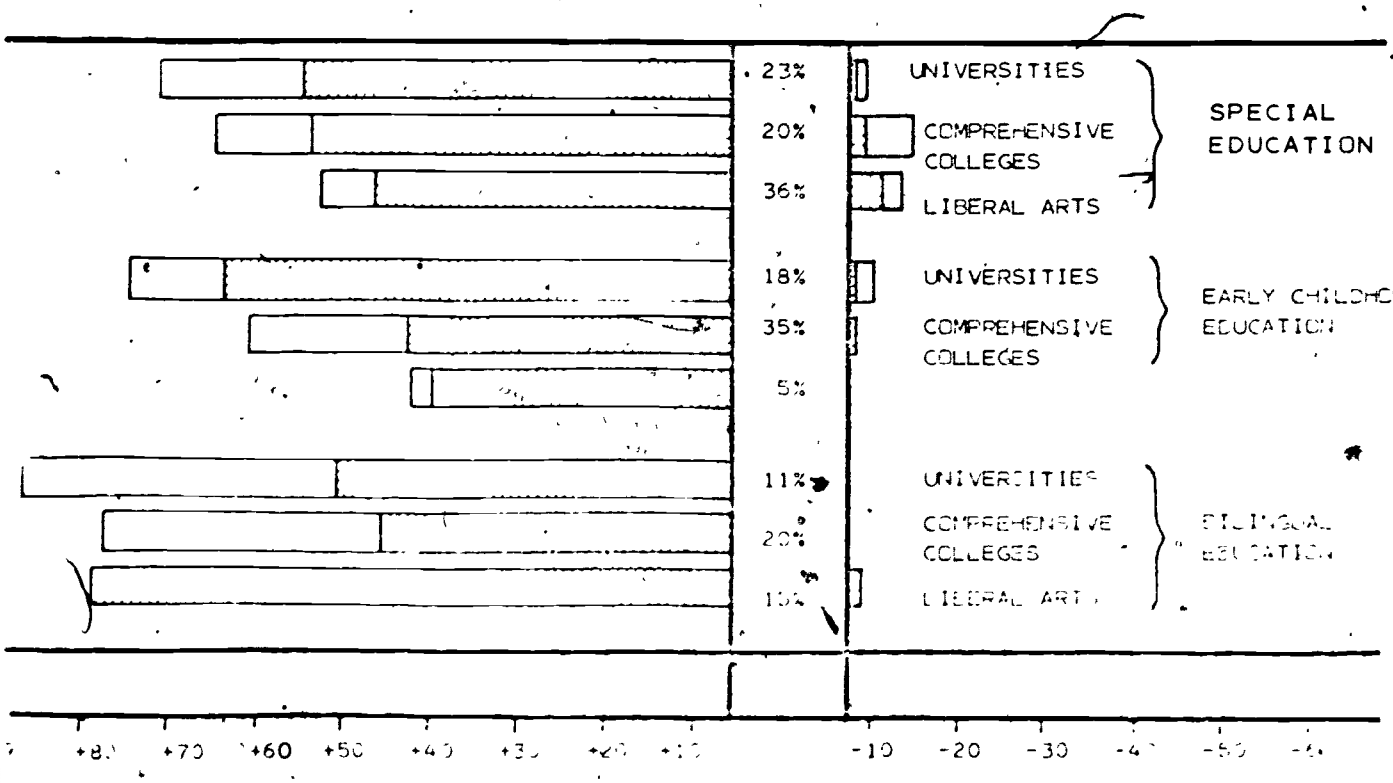
These data indicate a continuation of past trends in the supply of trained education personnel. However, when the data are analyzed by type and control of institution, as shown in Chart 12, an interesting picture emerges:

CHART 12. ANALYSIS OF ANTICIPATED CHANGES: PUBLIC AND PRIVATE INSTITUTIONS



PUBLIC INSTITUTIONS WILL CURTAIL THEIR ELEMENTARY AND SECONDARY PROGRAMS MORE SEVERELY THAN PRIVATE INSTITUTIONS

ANALYSIS OF ANTICIPATED CHANGES: TYPE OF INSTITUTION



UNIVERSITIES WILL TAKE THE LEAD IN ADAPTING TO SPECIALIZED TEACHING NEEDS

- Public institutions plan more extensive curtailments of elementary and secondary education than do private institutions.

- Universities will take the lead in adapting training to meet demands for teachers in specialized fields.

> Although the surplus of teachers has been cut nearly in half between 1973 and 1976, institutions are likely to continue contracting their program offerings in surplus areas such as elementary and secondary education, while they are expanding efforts in high demand national priority areas such as special education and bilingual education.

SECTION THREE: CHARACTERISTICS AND MOTIVATIONS OF RECENT GRADUATES ENTERING THE LABOR MARKET AS BEGINNING TEACHERS

Section One has described in some detail the general dynamics of the labor-market for trained education personnel and has presented a picture of the supply of beginning teachers. Section Two has indicated that the mechanisms for adjustment of the teacher supply relies heavily upon the decisions of individual students to seek preparation as a teacher. The purpose of this section is to provide a more detailed picture of the beginning teachers of 1975-1976, particularly their demographic characteristics and their motivations for entering the education professions.

Demographic Characteristics of New Teachers

Traditionally, a large portion of the teaching profession has been composed of women and persons from small town and rural backgrounds. In addition to this, many of the institutions which were established to advance the higher education opportunities for persons from ethnic minorities had a heavy emphasis on the training of teachers. The data from the sample of 3600 persons in their final year of teacher preparation found little evidence of change from these historic patterns.

Sex

The new graduates are 72.5% women; however, when the entire enrollment of persons preparing to be teachers is considered, the balance between the sexes is approximately equal, with only 52% women.

As shown in Table 5, the extreme imbalance of women to men is found only in elementary education.

TABLE 5

DISTRIBUTION OF FULL TIME TEACHER PREPARATION ENROLLMENT BY SEX AND FIELD OF TRAINING

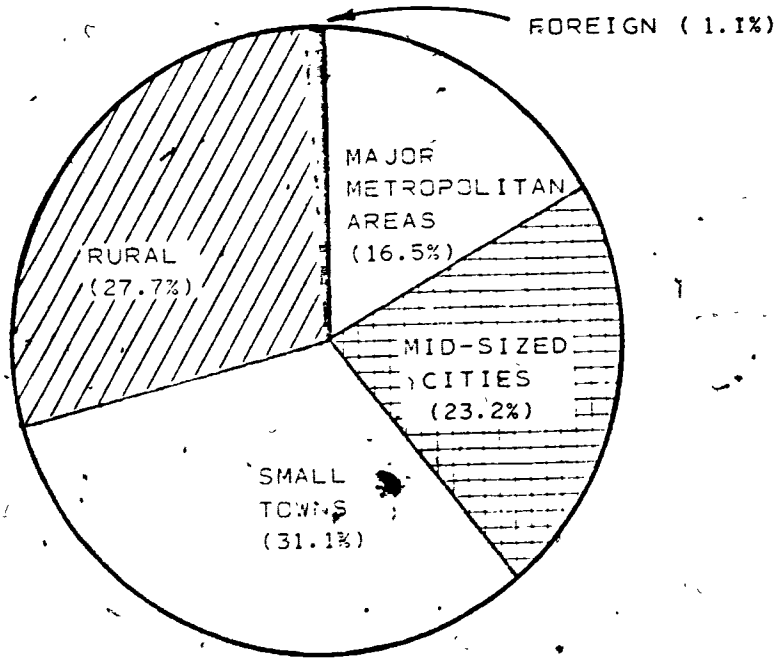
Field of Training	Male	Female
All Fields Combined	48.0%	52.0%
Elementary	33.2%	66.8%
Secondary	53.7%	46.3%
Special Education	41.5%	58.5%
Subject Specialists	64.4%	35.6%
Occupational/Vocational	58.1%	41.9%
School Support Personnel	46.9%	53.1%

These data indicate that the future supply of teachers may include a much higher percentage of males than were found in the graduates from AY 1975-1976. The data cannot, however, indicate whether males have a higher tendency to drop out of teacher education or to fail to seek a teaching certificate than females.

Geographic Location

The new graduates (as shown in Chart 13) are predominately (31%) from small towns of less than 100,000 persons. The next largest category is rural (28%). Thus, the largest segment of the new teacher supply is from small town or rural areas, in keeping with past trends. Only seventeen

CHART 13. URBAN - RURAL COMPOSITION OF NEW TEACHERS



percent of the graduates were from major metropolitan areas; this is in contrast to the general college population* where 32.1% of the persons are from major metropolitan areas.

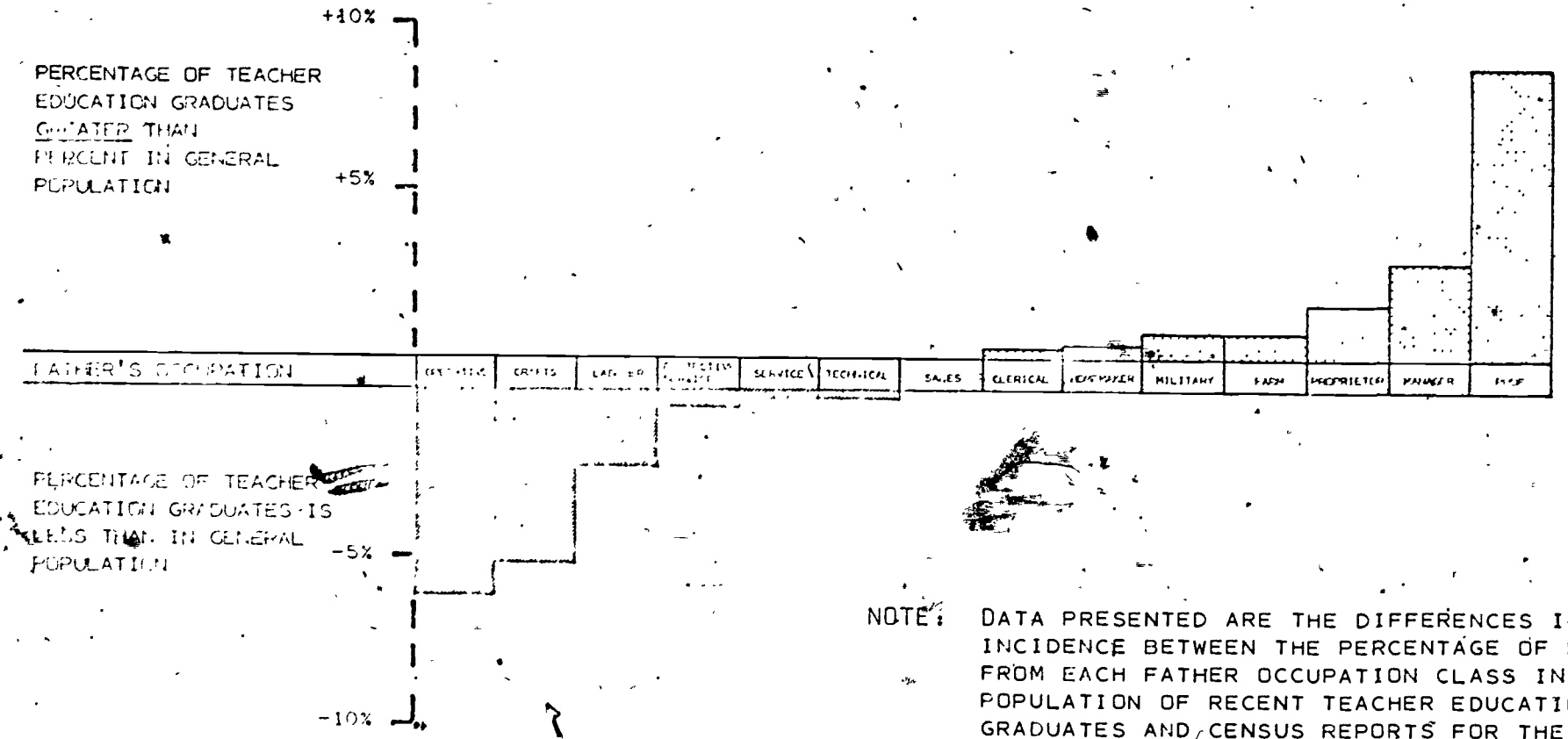
Family Background

The NSPPT requested information about the principal occupation of both the fathers and mothers of students in their final year of teacher preparation. In Table 6 the distribution obtained by the NSPPT is compared with the results obtained using a similar item in the National Longitudinal Study of the high school class of 1972, which represent the distribution of parental occupations for the general population of persons in roughly the same age bracket as the NSPPT subjects.

The data in Chart 14 show that blue collar occupation groups are slightly under-represented in the population of beginning teachers, while while collar occupation groups are slightly over-represented. The magnitude of these differences are, however, quite small -- the data in Chart 15 are more reflective of a broad base of access. The two groups which are most under-represented are crafts (plumbing, mason, machinist) and operative (truck driver, meat cutter, assembler); these groups are not, however, the lowest-paid groups. Thus, teacher education appears to be relatively accessible to all income groups.

*Bureau of the Census: Current Population Reports - School Enrollment, Social and Economic Characteristics of Students. Series P-20, No. 28B, November 1975.

CHART 14. FAMILY BACKGROUND OF RECENT TEACHER EDUCATION GRADUATES
AGGREGATE UNITED STATES AY 1975-1976



NOTE: DATA PRESENTED ARE THE DIFFERENCES IN INCIDENCE BETWEEN THE PERCENTAGE OF PERSONS FROM EACH FATHER OCCUPATION CLASS IN THE POPULATION OF RECENT TEACHER EDUCATION GRADUATES AND CENSUS REPORTS FOR THE GENERAL POPULATION.

TABLE 6

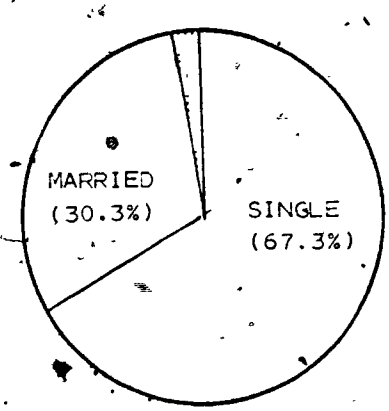
PRINCIPAL OCCUPATION OF FATHER

Comparison of NSPPT Persons In Their Final Year of Teacher Preparation With the General Population

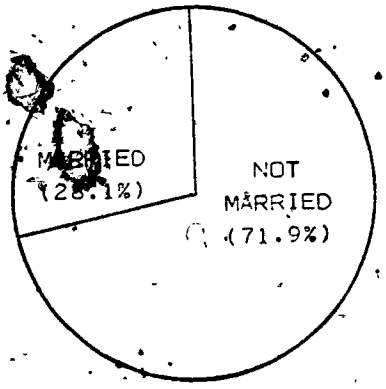
Occupation Type	NSPPT Recent Graduates	General Population[1]
Farmer or farm manager	6.6	5.9
Laborer: construction work, car washer, sanitary worker	8.8	11.0
Operative: meat cutter, assembler, bus, taxi or truck driver	5.7	11.8
Service: barber, beautician, waiter, practical nurse	2.0	2.1
Crafts: baker, mechanic, machinist, painter, plumber, carpenter	13.1	18.2
Protective Service: detective, police, sheriff, guard, fire	2.1	2.6
Technical: drafting, computer, electrician, medical technician	2.9	3.0
Clerical: bank teller, bookkeeper, secretary, typist, mail carrier, ticket agent	3.1	2.9
Sales: salesperson, sales clerk, advertising, insurance agent, real estate	6.0	6.0
Professional: Accountant, artist, clergy, dentist, physician, registered nurse, engineer, lawyer, librarian, teacher, scientist	22.3	14.0
Manager: Administrator, sales manager, office manager, buyer, government official	16.3	13.7
Proprietor: Owner of a small business or restaurant, contractor	8.4	6.9
Military: Enlisted person or officer in the Armed Services	1.9	2.6
Homemaker	0.5	0.2

[1] Source: National Longitudinal Study of the High School Class of 1972, Base Year Study

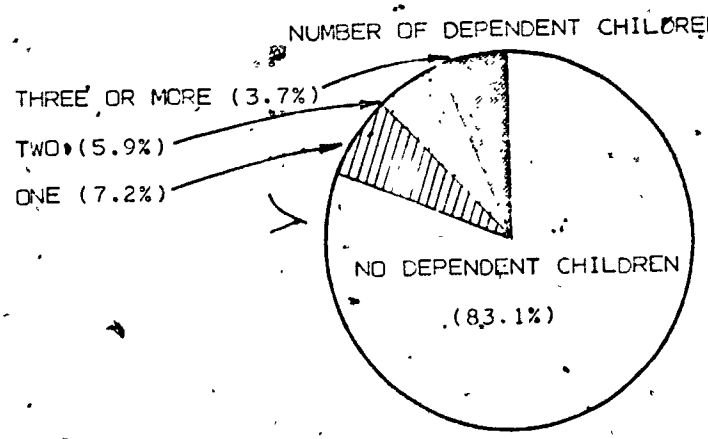
CHART 15. MARITAL STATUS AND NUMBER OF DEPENDENT CHILDREN OF RECENT TEACHER EDUCATION GRADUATES



TEACHER EDUCATION GRADUATES
AY 1975-1976



GENERAL POPULATION
OF COLLEGE SENIORS



Marital Status and Dependents

As shown in Chart 15, approximately thirty percent of the new teacher education graduates are married. This is approximately the same percentage as is found in the general population* of persons attending four year colleges (28.7%) in a comparable age range.

Eight-three percent of the graduates have no dependent children, while approximately four percent have more than three dependent children.

Age

As shown in Chart 16, the distribution of recent teacher education graduates contains a large number of persons who are over twenty-three years of age; "lock-step" progression from high school through completion of a bachelor's degree would place a person between age 21 and 22 in the senior year. Thus, the finding that 35% of the respondents were age 23 or older was not expected and is significant. Further, persons in this age range constitute only 20% of the general college population.*

During the seven institutional case studies, interviews with students showed that this group of older graduates were largely women seeking to achieve professional levels of work through obtaining a teaching certificate. Approximately one-third of the "over 23" group already possessed a bachelor's degree and were seeking credits toward certification; most of these degrees were obtained in the period 1970-1975. One respondent, however, had received her bachelor's in 1947.

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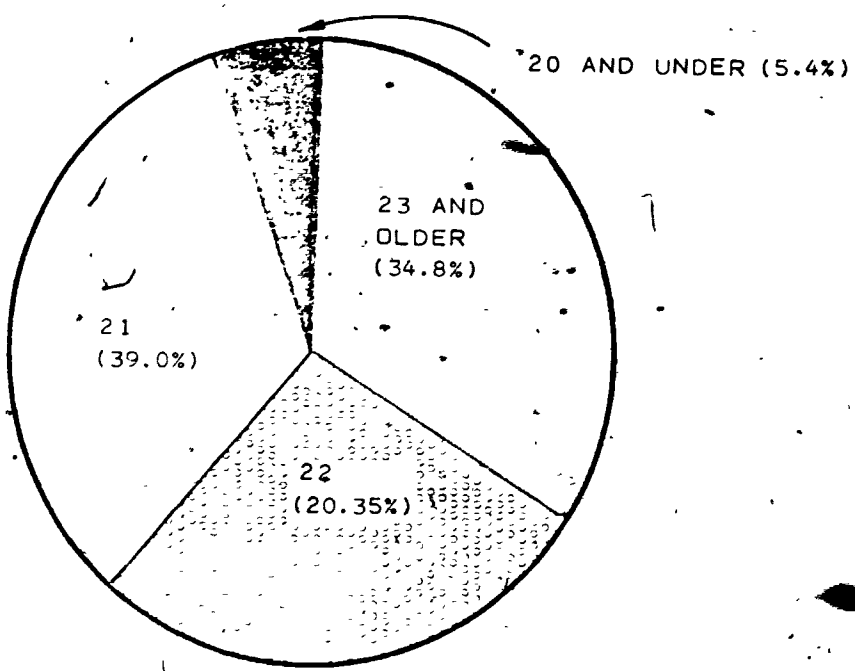
*Source: Bureau of the Census, Current Population Reports, op. cit.

CHART 16. AGE DISTRIBUTION OF NEW TEACHERS



THE AGE DISTRIBUTION OF STUDENTS REVEALS THAT A LARGE SEGMENT OF OLDER PERSONS ARE RECEIVING PREPARATION AS TEACHERS

Linguistic Skills

The new graduates do not bring extensive skills in foreign language to the teaching profession (Chart 17). Persons receiving initial certificates do not have a command of foreign language -- either as native speakers or by training -- which would be required for widespread implementation of bilingual education; fewer than three-tenths of one percent have sufficient linguistic competencies to participate in such efforts.

Attitudes Toward Work

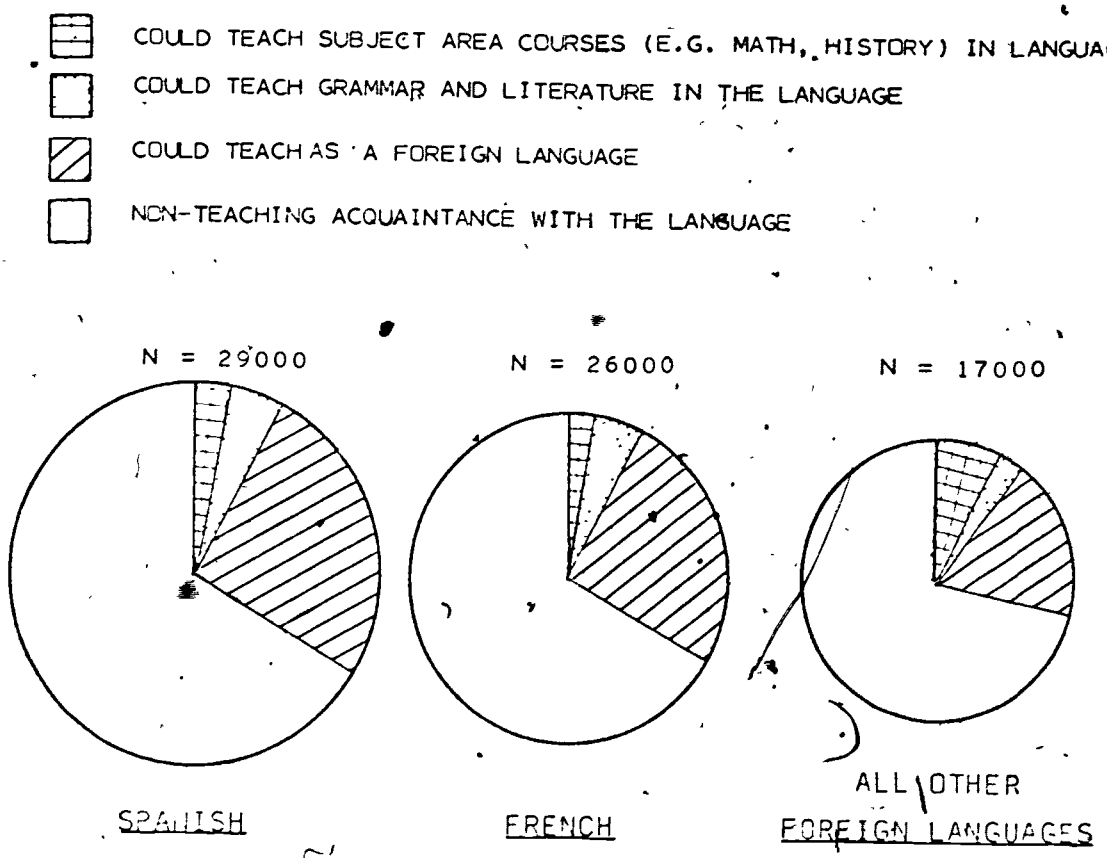
The NSPPT collected detailed information about the new graduates' values in the area of work and teaching. The data show clearly that the beginning teachers of 1976 will bring a highly professional value structure to their job-situation.

The most important aspects of job-satisfaction were related to the professional aspects of teaching. More than 60% of the respondents (see Chart 18) cited the following as being very important in the determination of their satisfaction with a particular career:

- Independent decision-making
- Social worth of the tasks involved in the job
- Work with a challenge
- Use of skills and training acquired in college

The need for favorable economic incentives and a convenient, amiable job climate was of lesser importance than these professional aspects. Thus, the recent teachers have expressed values which are consistent with those of independent professionals.

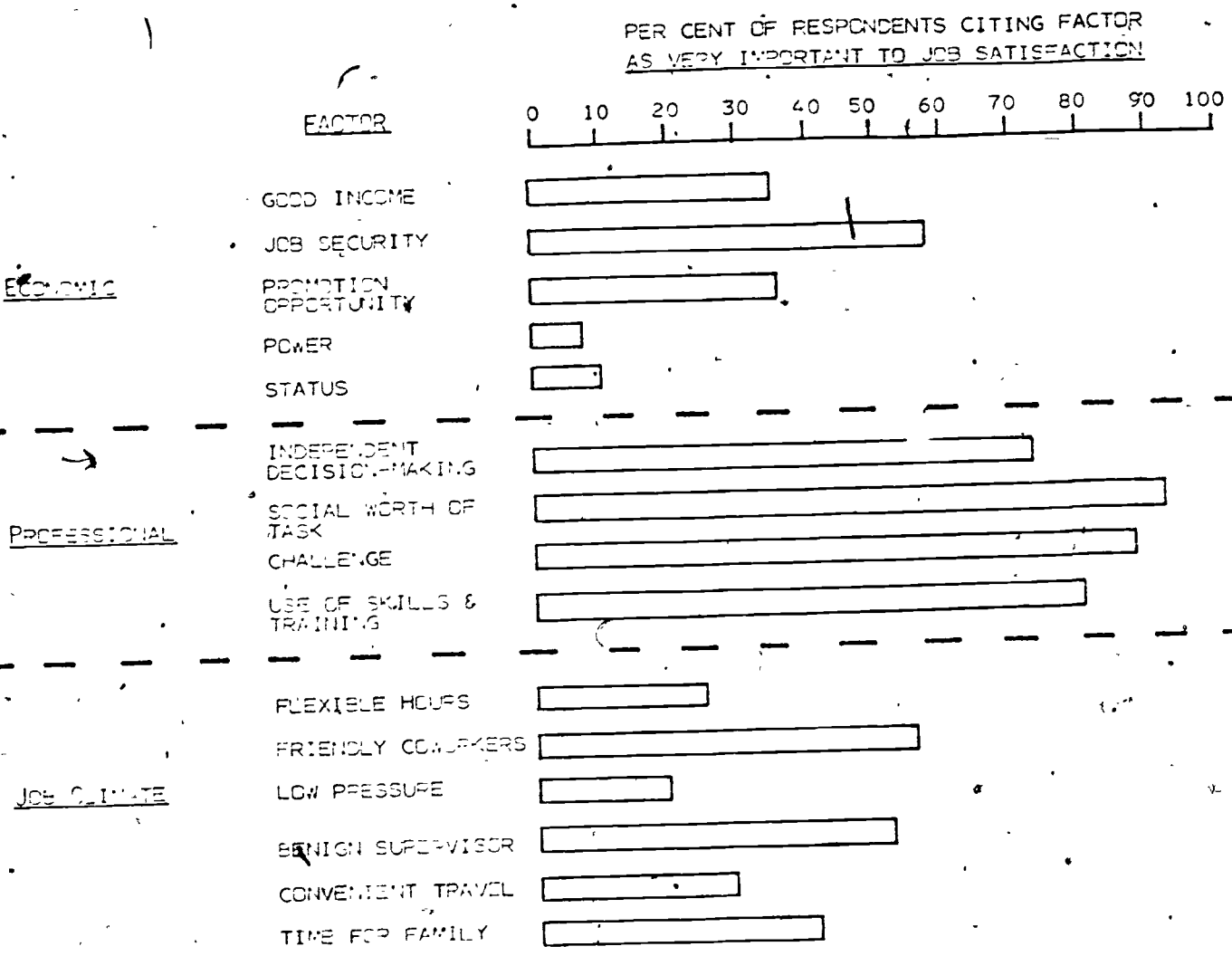
CHART 17. LINGUISTIC CAPABILITIES OF RECENT TEACHER GRADUATES. AGGREGATE UNITED STATES AY 1975-1976



THE LINGUISTIC CAPABILITIES OF RECENT TEACHER EDUCATION GRADUATES ARE NOT COMMENSURATE WITH MASSIVE PLANS FOR BILINGUAL EDUCATION

CHART I8. VALUES OF TEACHER EDUCATION GRADUATES CONCERNING WORK AND TEACHING

AGGREGATE UNITED STATES AY 1975-1976



SENIORS IN TEACHER PREPARATION (1975) STRESSED PROFESSIONAL VALUES AS IMPORTANT COMPONENTS OF THEIR WORK SATISFACTION

The Motivation of Students to Enter the Supply of Teachers

The supply of teachers represents the end-product of a complex process which begins with entry to an institution of higher education and ends with the receipt of an initial teaching certificate and the decision to seek work as a teacher. This portion of the paper is intended to provide a brief description of some of the factors involved at the major decision-points in the supply system.

Entry To The Institution

The NSPPT requested information from its sample of 3600 persons in their final year of teacher preparation to assess the effects of a variety of factors on their choice of their current college or university. These data are presented in Charts 19 through 23, which include an analysis of each factor by father occupation and ethnic background.

The most salient factor was related to the availability of programs desired by the student. Over sixty percent (c.f. Chart 19) of all respondents cited this factor as being "very important" to their choice of their current institution. Clearly, the attraction of students is to the program: only forty percent of the respondents cited the institution's reputation as important to their choice (c.f. Chart 20).

The next most important factor was the likelihood of getting a good job after graduation: approximately fifty percent of the respondents cited this as very important to their choice of institutions, as shown in Chart 21.

CHARTS 19-23: EFFECT OF VARIOUS FACTORS IN THE STUDENT'S DECISION TO ATTEND HIS/HER CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. DATA ARE WEIGHTED NATIONAL ESTIMATES OF THE PERCENT IN EACH GROUP WHO INDICATED THAT EACH FACTOR WAS "VERY IMPORTANT" TO HIS/HER CHOICE OF INSTITUTION. BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. AY 1975-1976

CHART 19. AVAILABILITY OF DESIRED PROGRAMS AS A FACTOR

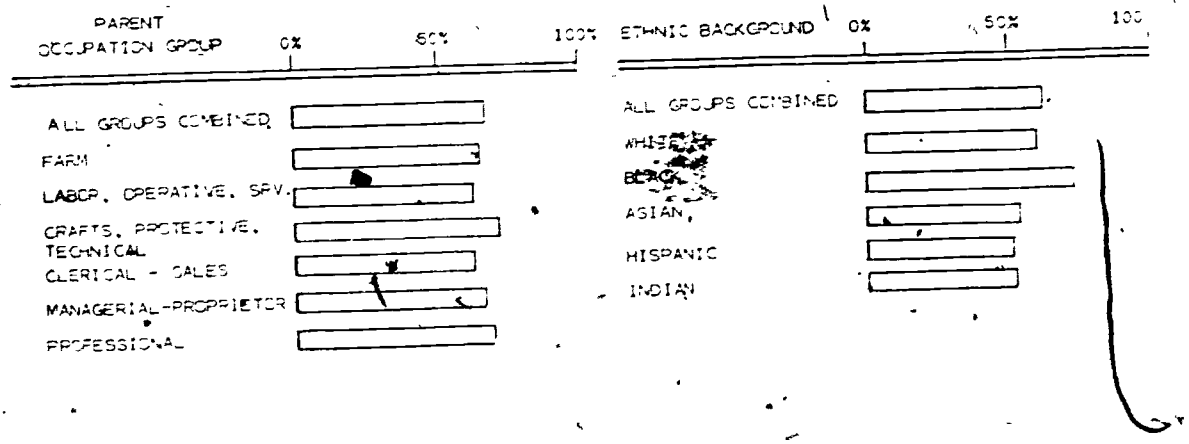
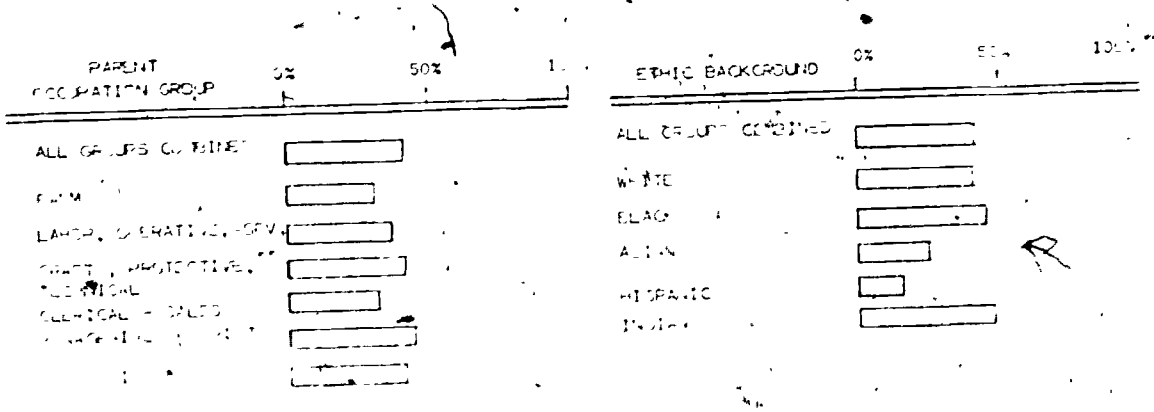


CHART 20. EFFECT OF INSTITUTIONAL REPUTATION AS A FACTOR



Convenience to home was cited as very important by approximately forty-five percent of the respondents. The data shown in Chart 22 shows that this factor had a differential impact across both income groups and ethnic groups. In general, minorities -- particularly Hispanics -- and persons from lower income occupation backgrounds had a greater tendency to consider this factor as "very important" than those from higher-income or majority background. In all likelihood, this represents the effect of economic considerations by these groups seeking opportunities for education near their home to reduce the costs of lodging and board.

Finally, the least important factor was the effect of parent influences. With the exception of the subset of American Indian respondents, only twenty percent of the respondents cited their parent's opinions and influences as being "very important" to their choice of institution (c.f. Chart 23.

Thus, the data show that the current group of recent graduates are very concerned with programs, job prospects and (to some extent for lower income subgroups) the costs of education. These factors may lead the student to shift institutions: Chart 24 shows that approximately forty-two percent of the respondents had attended at least one institution prior to their current institution. Approximately twenty-two percent of the recent graduates had attended a two-year institution -- underscoring the economic dimension of institutional choice in teacher education.

Institutional choice is a matter of careful consideration by prospective teacher education students: the availability of programs, job prospects, and to some extent, economic factors are important factors in choosing an institution. Further, this decision is not always final. Two out of five persons have changed institutions.

CHART 21. LIKLEHOOD OF OBTAINING A GOOD JOB AFTER GRADUATION AS A FACTOR

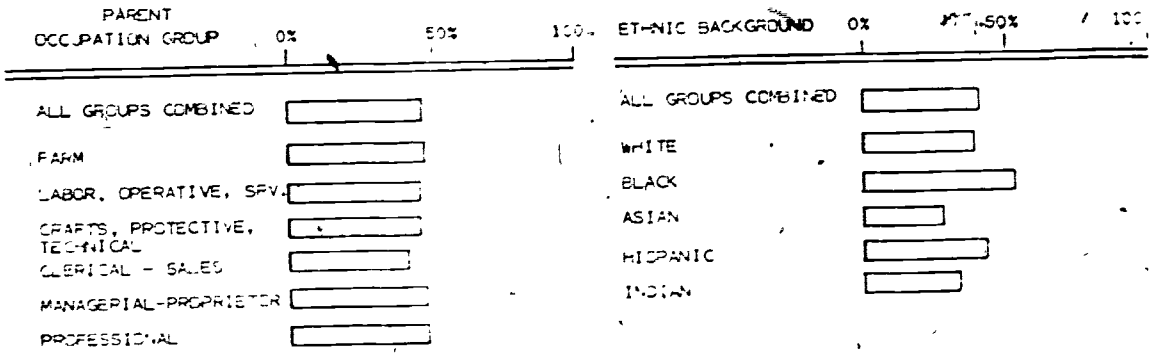


CHART 22. CONVENIENCE TO HOME AS A FACTOR

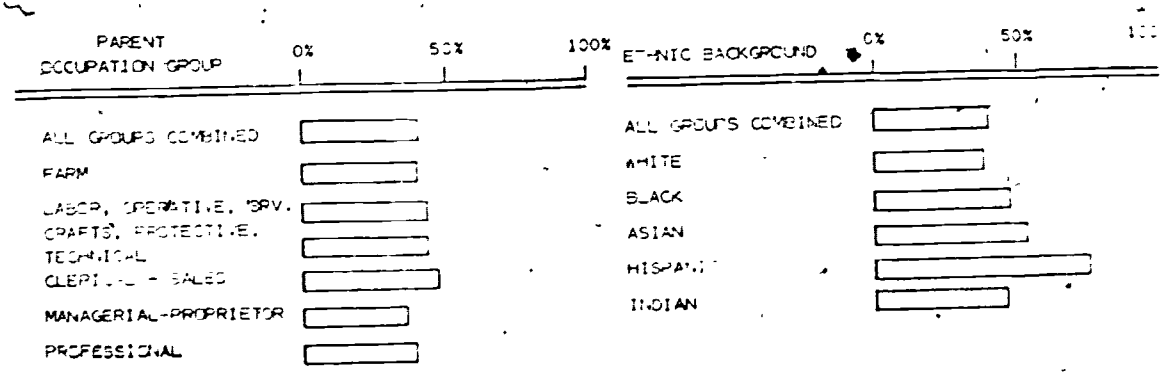


CHART 23. PARENT OPINIONS AS A FACTOR

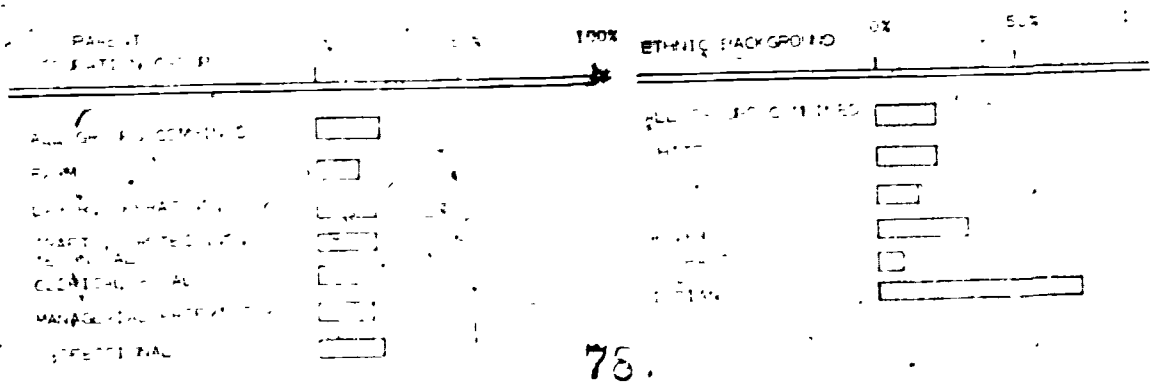
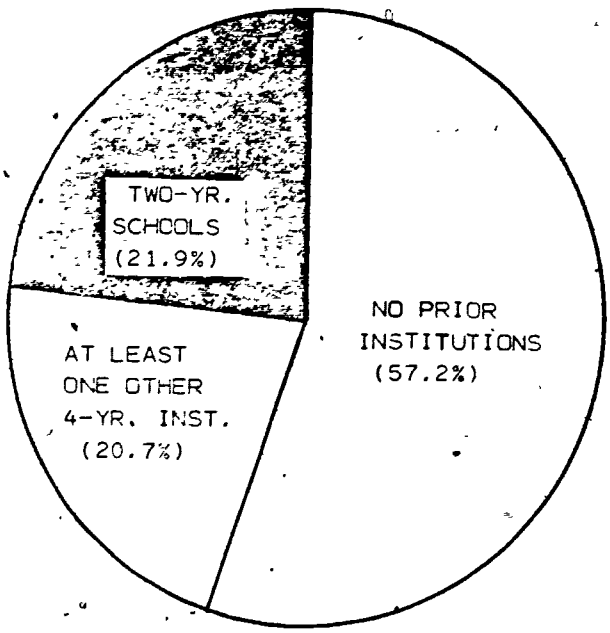


CHART 24. STUDENT USE OF TWO-YEAR INSTITUTIONS
APPROXIMATELY ONE IN FIVE SENIORS REPORTED THAT HE OR SHE HAD ATTENDED A TWO YEAR INSTITUTION



Choice of Teacher Preparation

The data as discussed above indicate that persons choose their institutions with a keen interest in a program of training. The NSPPT asked its 3600 respondents about the impact of a number of factors on their decision to enter a teacher preparation program. The data, as shown in Chart 25, indicate that the primary motivation of these persons is a desire to work with children; over ninety percent of the respondents cited this as being important to their choice.

The second most important factor were the influences of professors in the school, college or department of education.

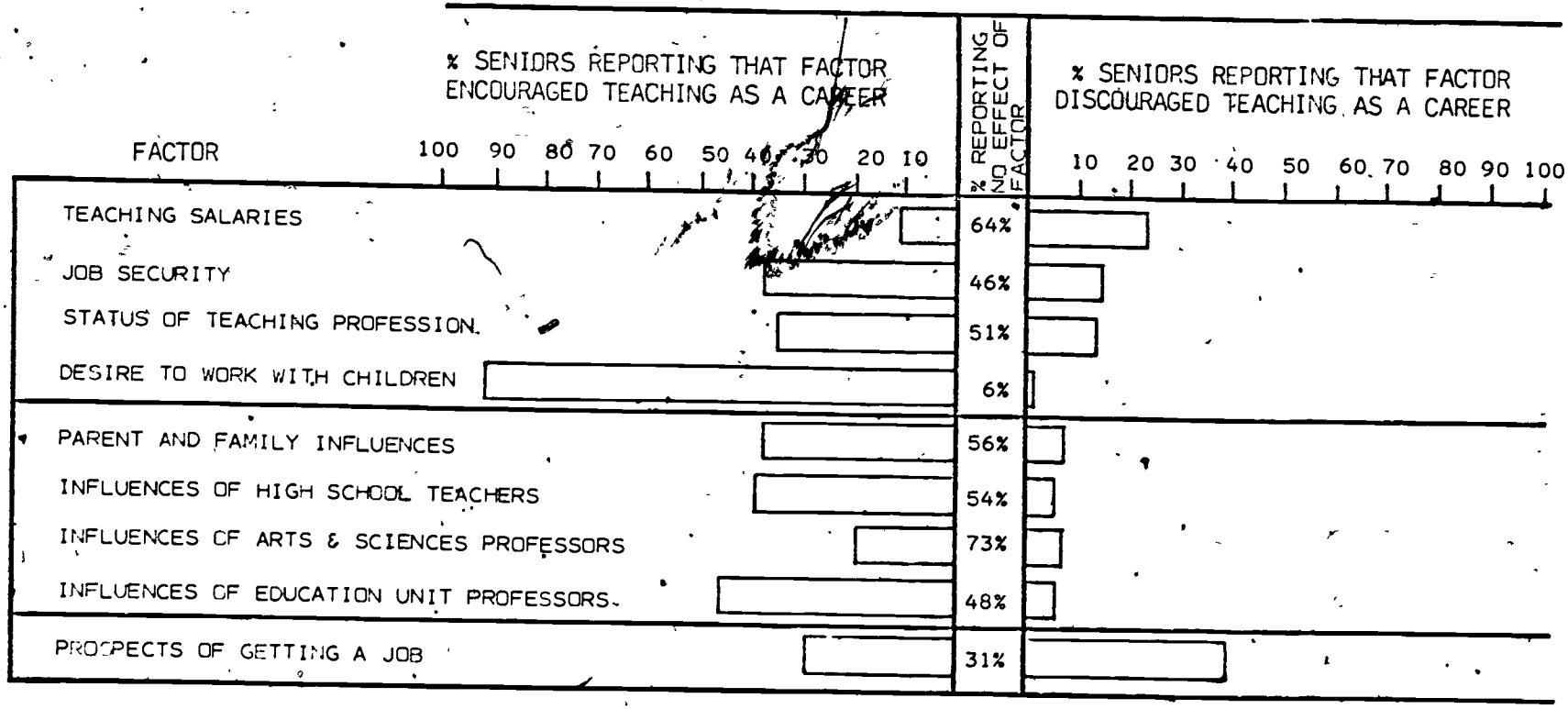
Only two factors had an appreciable effect in discouraging persons from entering teaching. The job market had discouraged approximately forty percent of the respondents while teacher salaries had discouraged approximately twenty-five percent of the respondents.

The NSPPT also investigated the extent to which the group of 3600 persons had received counseling about careers in teaching. The results of this analysis are shown in Chart 26. There was a clear difference between public and private institutions; twelve percent of the students at public institutions received no career counseling at all while approximately twenty-five percent of those at private institutions reported none.

However, only one-fourth of all students at either type of institution received career counseling prior to making a substantial commitment to teaching. The difference between the two types of institutions occurred primarily in counseling prior to student teaching.

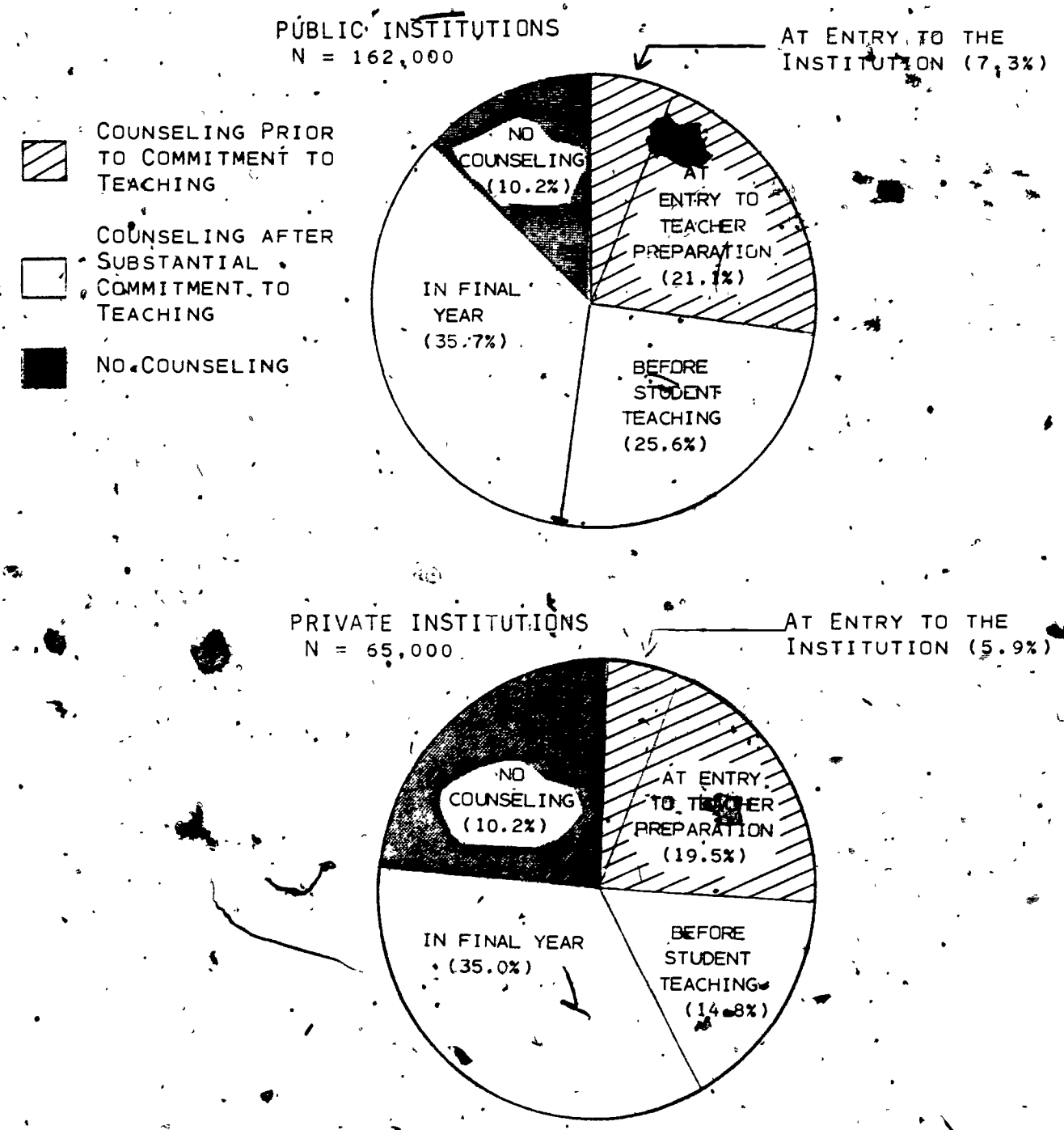
CHART 25. FACTORS AFFECTING STUDENT CHOICE OF CAREERS IN TEACHING

AGGREGATE UNITED STATES AY 1975-1976



SENIORS IN PROGRAMS OF TEACHER PREPARATION WERE ASKED TO REPORT ON THE EFFECTS OF SEVERAL FACTORS ON THEIR DECISION TO ENTER TEACHING AS A CAREER. THE DESIRE TO WORK WITH CHILDREN AND THE INFLUENCES OF EDUCATION FACULTY PROVIDED THE STRONGEST ENCOURAGEMENT WHILE MARKET AND SALARY FACTORS PROVED TO BE THE MOST DISCOURAGING.

CHART 26. TIMING OF CAREER COUNSELING AS REPORTED BY PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. AGGREGATE UNITED STATES AY 1975 1976



PERSONS FROM PRIVATE INSTITUTIONS WERE MORE THAN TWICE AS LIKELY TO HAVE RECEIVED NO FORM OF CAREER COUNSELING THAN THEIR COUNTERPARTS AT PUBLIC INSTITUTIONS. HOWEVER, ONLY ABOUT ONE FOURTH OF PERSONS FROM EITHER TYPE OF INSTITUTION RECEIVED CAREER COUNSELING PRIOR TO HAVING MADE A SUBSTANTIAL COMMITMENT IN TRAINING.

In a related study of full-time faculty in education, the NSPPT found that the faculty role in career counseling could be greatly improved:

- Although the faculty in the education unit were a potent source of encouragement for students in their decision to prepare as teachers, only three-fourths were involved in career counseling.
- Of those involved in counseling, over eighty percent reported that they had very seldom or never advised students to seek careers outside teaching.
- Only fifty-four percent could recall having advised students to change from teaching specialties in over-supply to those with current demand.
- Almost two-thirds felt that the job market information available to them was not accurate to support fully the counseling function.

Students are drawn to teacher education with a strong desire to work with children. The only factor which acts to significantly discourage students from careers in teaching is the likelihood of obtaining a job. However, the data show that only one-fourth of the students receive career counseling prior to making a substantial commitment to teacher preparation. A study of faculty revealed that current sources of information were inadequate to support their role in counseling.

Student Perceptions of the Market for Trained Education Personnel

The NSPPT requested information from each of the 3600 persons in their final year of teacher preparation about their perceptions of the relative balance between the supply and demand for teachers in a variety of fields. These data are shown in Chart 27

Although the perceptions of the students who expressed an opinion are in rough concordance with the general labor market, a large percentage of respondents were unable to judge the relationship between supply and demand. The inability to judge was most pronounced in those specialty fields for which demand actually exists.

> NSPPT data show that student information about the labor market for teachers is limited -- particularly in the high-demand specialty fields.

Career Plans of Recent Graduates

Each of the 3600 persons in their final year of teacher preparation was asked to describe their career intentions for the year immediately following receipt of their teaching certificate.

These data are presented in Chart 28 analyzed by father occupation group and ethnic background.

CHART 27. PERCEPTIONS OF THE LABOR MARKET FOR TRAINED EDUCATION PERSONNEL AS REPORTED BY A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER EDUCATION

AGGREGATE UNITED STATES AY 1975-1976

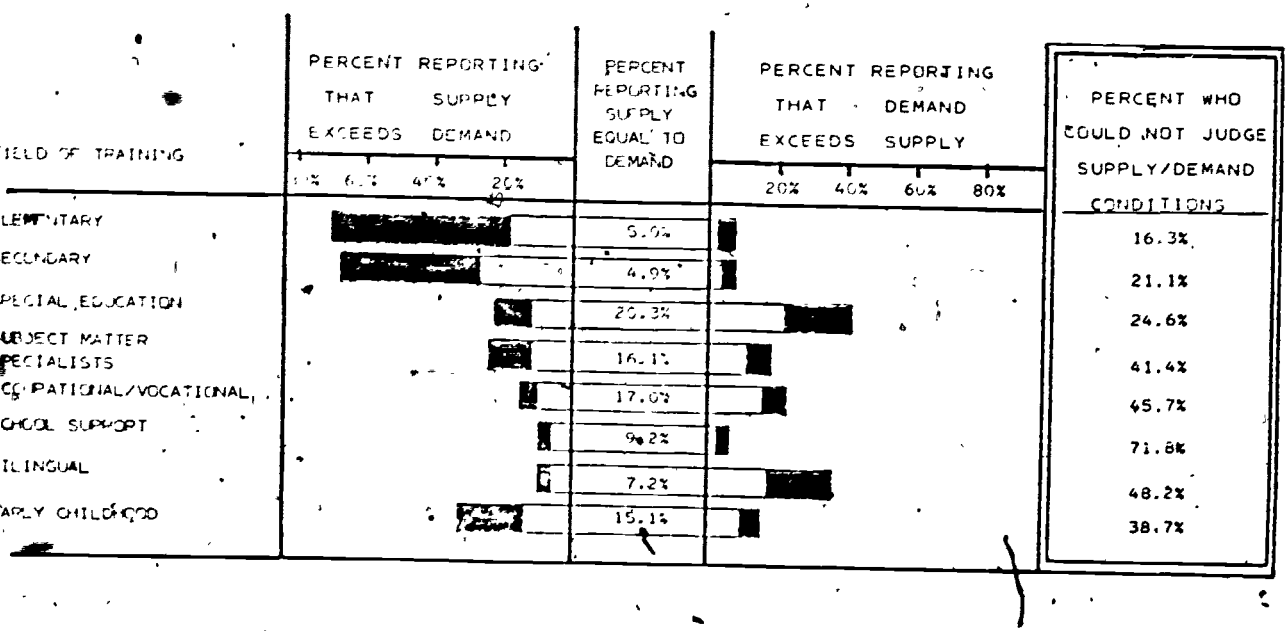
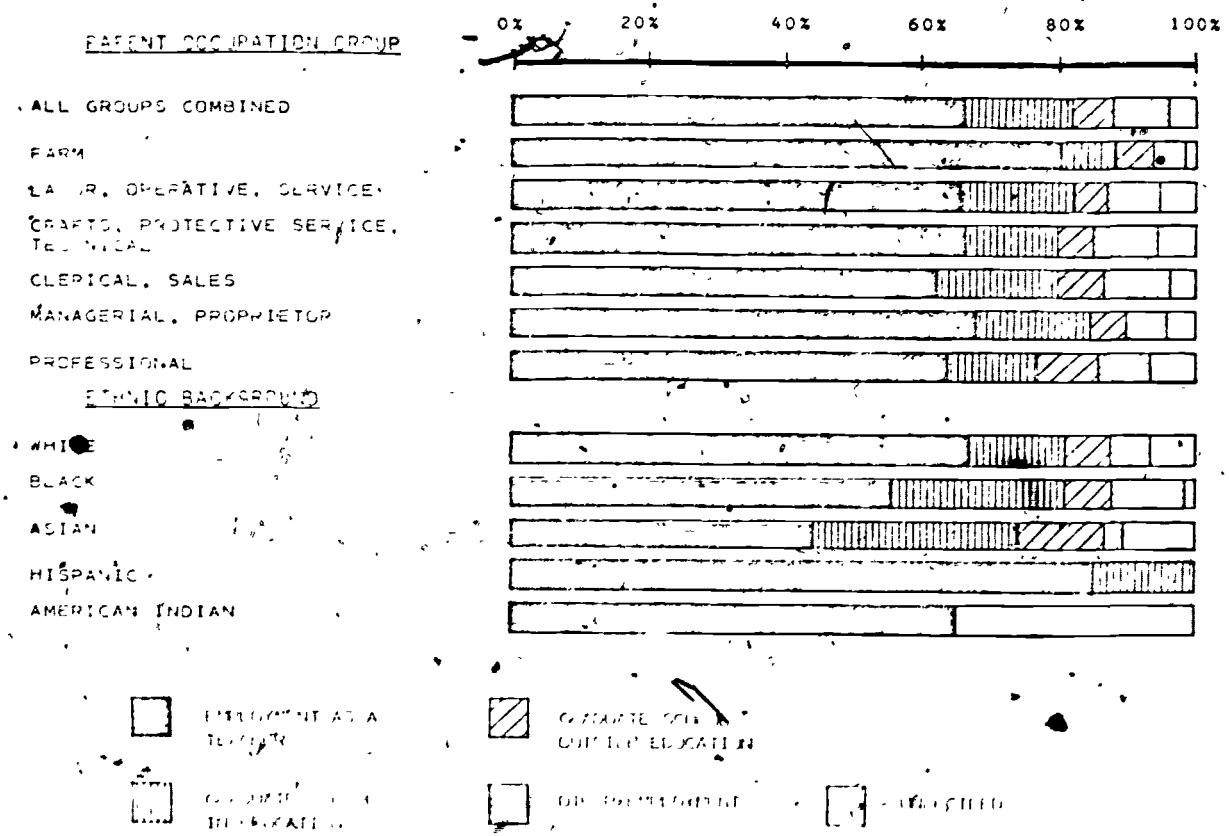


CHART 28. CAREER PLANS OF PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. DATA ARE THE PERCENTAGE OF PERSONS IN EACH GROUP IDENTIFYING EACH OF THE CAREER ALTERNATIVES (SEE LEGEND) AS THEIR MOST LIKELY PURSUIT FOLLOWING GRADUATION OR CERTIFICATION AS A TEACHER. BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION. AY 1975-1976



Approximately sixty-five percent of the respondents plan to be employed as a teacher during the next year. Among the occupational groups, persons from farm backgrounds had the highest level of intended participation in teaching (81%). Other occupational groups were close to the overall figures.

With respect to ethnic background, Blacks and Asians plan to enter teaching at a much lower rate than whites -- and more blacks (25%) and Asians (35%) intend to go to graduate school in education than the overall group (15%).

Of the group of persons who plan to seek further graduate training in education (approximately 32,000), 96% plan to enter masters programs. Of these, more than half plan to attend on a part-time basis. (Chart 29)

High demand specialties (special education, bilingual, early childhood) will attract 43% of those who plan to seek further training in education.

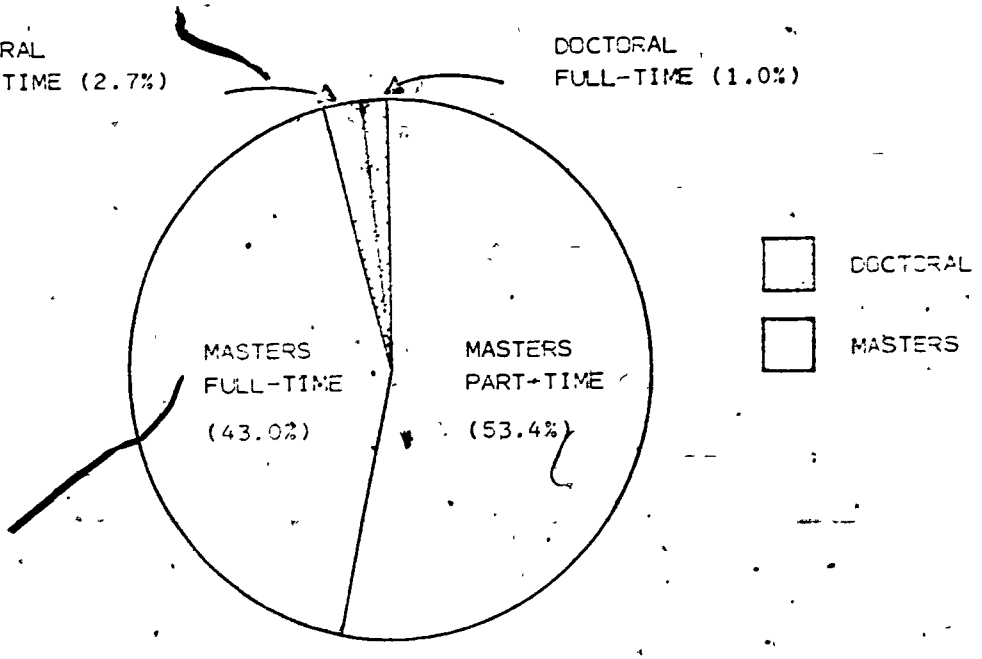
The data indicate that persons may be seeking to improve their position in the labor market. For example, special education comprises 12% of preservice education, but 25% of the graduates plan to pursue graduate work in special education.

When asked for their reasons for pursuing graduate education, more than 50% of the respondents indicated that they believed that such training was essential for their intended teaching specialty.

CHART 29. INTENDED DEGREE, AREA OF TRAINING, AND PART/FULL TIME ATTENDANCE STATUS OF PERSONS COMPLETING TEACHER PREPARATION IN AY 1975-1976 WHO PLAN TO PURSUE GRADUATE TRAINING IN EDUCATION

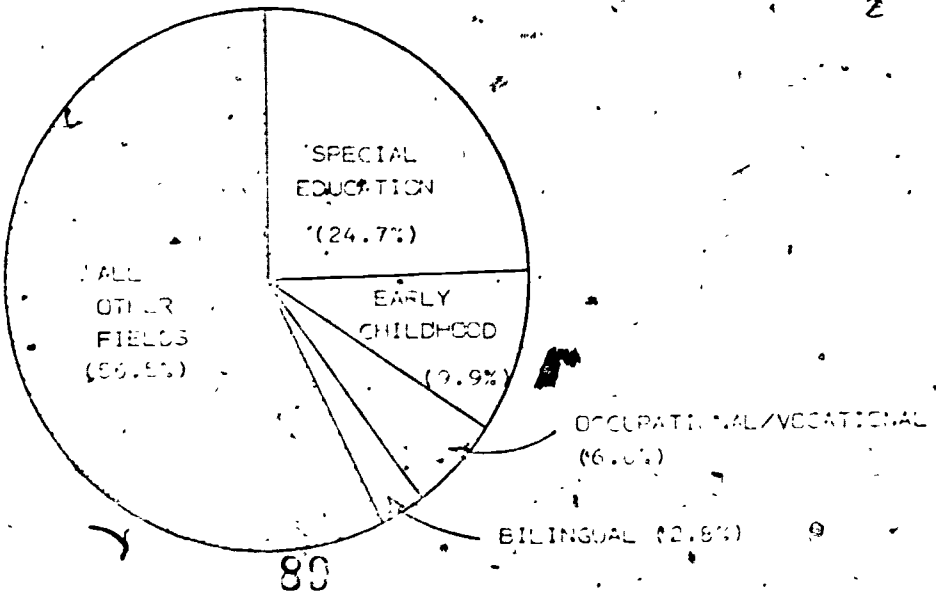
AGGREGATE UNITED STATES AY 1975-1976

N = 31,600



APPROXIMATELY 24.5% OF THE NATION'S 227,000 GRADUATES FROM PRE-SERVICE PROGRAMS INTEND TO PURSUE GRADUATE TRAINING IN EDUCATION - PRIMARILY MASTERS DEGREES ON A PART-TIME BASIS

N = 31,600



SPECIAL EDUCATION COMPRISES 10% OF PRESERVICE TRAINING BUT 24.7% OF THE GRADUATES PLAN TO PURSUE ADVANCED TRAINING IN SPECIAL EDUCATION. HIGH-DEMAND SPECIALTIES COMPRISE 43.4% OF INTENDED

Approximately sixty-five percent of the recent graduates have intentions of working as a teacher following receipt of their initial certificate. An additional fifteen percent indicated that they planned to pursue graduate training in education; of these, slightly more than half indicated that they would pursue masters degrees on a part-time basis.

Only twenty-five percent of the recent graduates indicated that they had received counseling about careers in teaching prior to making a substantial commitment to a particular field of training. Approximately thirty-five percent had received such counseling in their final year. Their perceptions of the market were roughly in accord with data on conditions as obtained from other sources; however, a substantial portion were unable to make judgments about market conditions in specialty fields where demand for teachers exists. Faculty identified lack of reliable information about the market as a major barrier to effective counseling.

SUMMARY

The National Survey of the Preservice Preparation of Teachers was commissioned in 1974 to investigate, among other things, the current conditions in the labor market for trained education personnel.

The study found that the market is going through a cycle of oversupply. A surplus of teachers began in 1970 which had its roots in both declining numbers of children of school age difficulties in the general economy. This surplus peaked in 1973 when 332000 persons received initial teaching certificates. In 1976, 227,000 persons entered the supply of beginning teachers. Although this is a substantial reduction, the NSPPT estimates that approximately 75,000 of these qualified persons will fail to find work as a teacher.

In an analysis of the supply of teachers by field of specialization, it was found that elementary and secondary education -- the two fields most closely associated with oversupply -- had experienced the greatest decline over the period 1973-1976. Specialized fields -- where demand for teachers exists -- have experienced some growth during this period, particularly special education.

The data indicate that the supply of teachers is responding to the market conditions in a fashion which would be expected from a free market -- supply is diminishing to meet demand. The NSPPT investigated the mechanisms which teacher education programs used to determine the number of persons to be trained. The results showed that student decisions werr the dominant factor in the determination of program size:

over forty-four percent of the individual programs encompassing more than sixty percent of the supply of teachers relied on student decisions to fix program size. Thus, the major mechanism for regulating the supply of teachers lies in the decision of individuals who choose programs of teacher education.

Although the supply is contracting to meet demand, the adjustment has been slow and has not yet reached equilibrium. Given the role of the student as a primary regulator of supply, the NSPPT undertook an in-depth analysis of the factors which influence the choices of students to seek training as a teacher.

The current group of recent graduates is predominately women (although this may change substantially in future years). Minorities are represented roughly in proportion to their numbers in the general population. The new graduates tend to come from rural or small town backgrounds; persons from urban areas are under-represented in teacher education with respect to their incidence in the general population of college students.

Teacher education provides opportunities for persons from all economic levels to obtain higher education. An analysis of father occupations revealed a wide range of backgrounds represented in the new graduates.

Students apparently place great emphasis on the availability of particular training programs in their choice of an institution of higher education; in addition, the prospects of obtaining a job after graduation also ranked as an important factor in choosing an institution. Further, the decision to choose an institution is not always final: two out of five persons changed institutions.

Persons are drawn to teacher education with a strong desire to work with children. The only factor which acts significantly to discourage students from careers in teaching is the market for teachers. However, the information which would assist students in making informed career choices may be lacking: only one-fourth of the students received career counseling prior to making a substantial commitment to teacher preparation. A separate study of faculty revealed that current sources of information were inadequate to support fully the counseling function. In fact, when asked to give their perceptions of the market for teachers, many (up to 70%) were unable to judge conditions in fields currently enjoying high demand for teachers.

Approximately sixty-five percent of the recent graduates have intentions of working as a teacher after receiving a certificate. An additional fifteen percent indicated that they planned to pursue graduate training in education; of these, slightly more than half indicated that they would pursue masters degrees on a part-time basis.

Although supply is adjusting to meet demand, the primary agent for effecting this change -- the student -- does not currently have the information required to make an informed choice of alternatives to teaching or of specialized fields within teaching. The data indicate that the gap between supply and demand is closing; thus major adjustments are not now necessary. The results of the study would indicate that reliable market-oriented information would enable the market to make the necessary adjustments through the counseling function of faculty and the career decisions of students.

APPENDIX A

TECHNICAL DESCRIPTION OF THE STUDY

TECHNICAL APPENDIX

Source of Data

The purpose of the National Survey of the Preservice Preparation of Teachers was to obtain reliable national estimates of the supply of education personnel, and to provide detailed information about the characteristics of programs, students and faculty involved in preservice education. The survey is intended to provide information about preservice teacher-training as offered in the nation's 1151 schools, colleges and departments of education. The estimates appearing in this report are based on data collected from four separate samples of:

- 240 institutions which prepare teachers
- 505 separate teacher preparation programs
- 3600 students in their final year of teacher preparation
- 480 full-time education faculty.

The sample of institutions was a single stage stratified random sample allocated proportional to the production of teachers in AY 1970-1971, the most recent data available during the survey design period.

All distinct teacher education programs (e.g., elementary, secondary, special education, etc.) within an institution were asked to complete a questionnaire, and thus constitute a stratified sample of programs.

Each institution was asked to construct a random sample of 15 students and 2 faculty. Thus, the samples of students and faculty constitute a two stage stratified sample.

The stratification variates are described below:

A. Control

1. Public
2. Private

B. Institution Type

1. Universities: Institutions which offer a wide variety of programs at both undergraduate and graduate levels and professional training in medicine and law.

2. Comprehensive Colleges: Institutions which offer programs at the undergraduate and graduate level with no professional training in either medicine or law.

3. Liberal Arts Colleges: Institutions which offer primarily undergraduate programs with the occasional graduate program not exceeding the masters level.

C. Size with respect to teacher preparation

1. Small: 0-100 teachers prepared in 1971
2. Medium: 101-500 teachers prepared in 1971
3. Large: more than 500 teachers prepared in 1971.

The sample was selected from a universe list carefully prepared for this study by cross-referencing data from the NCES EDSTAT system with the membership lists of professional organizations. With the assistance of Dr. Egon Guba of Indiana University, the population list was verified by a mailing to all state directors of teacher education and certification.

Cornell's method* was employed to fix the sample size to seek a five percent coefficient of variance at ninety-five percent (two sigma) confidence.

Survey Procedure

Instrument design was based on an extensive review of the literature and interviews with over 100 key educational decision-makers representing federal and state governments, institutions of higher education, commissions, and professional organizations. The instruments were subjected to field-test and extensive review by both the NCES and the OMB.

Instruments were mailed during November of 1975. A national network of regional representatives was employed to encourage response to the survey and to solve technical problems associated with the study.

Where applicable, two follow-up letters were sent to institutions and a final telephone contact were employed to obtain the overall 82% rate of participation in the survey.

*Cornell, F. G. "Stratified Random Sample of a Finite Population." Journal of the American Statistical Association 42, 553-560

Manual and machine editing of the forms were used to check the data for accuracy, consistency, and response within limits. The estimation procedure involved in the study involved two steps:

- Adjustment for nonresponse using the method of random replacement*
- Inflation of the data by the inverse of the school's probability of selection

Table A-1 shows the number of institutions in the universe and both the expected and obtained response to each of the survey instruments.

Reliability of the Estimates

Since the estimates in this report are based on a sample, they differ somewhat from the figures that would have been obtained from a complete census using the same forms and procedures. Particular care should be exercised in the interpretation of figures based on a relatively small number of cases as well as small differences between estimates. As is common to all survey work, the results are subject to errors of response and nonreporting as well as those due to sampling variability.

The standard error is the measure of sampling variability - that is, of the fluctuations which occur because a sample rather than the whole of the population is surveyed. As calculated for this report, the standard error also partially measures the effect of certain response and processing errors, but it does not measure any systematic biases in the data. The chances are 68 out of 100 that an estimate from a sample would differ from a complete census

*C.F. M.H. Hansen, et. al. Sample Survey Methods and Theory (Vol. I) (N.Y: Wiley) 1953 pp 232-233

figure by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error.

The figures presented in Tables A-2 through A-5 represent the standard errors for key data contained in this report.

TABLE A-1

RESPONSE TO THE SURVEY
BY TYPE OF INSTITUTION

		INSTITUTION PART I			INSTITUTION PART II			FACULTY			STUDENT			PARTICIPATION BY INSTITUTION	
		Expected	Received	Percent Response	Expected	Received	Percent Response	Expected	Received	Percent Response	Expected	Received	Percent Response	Number Participating	Percent Participating
All Schools Contacted		240	162	67	-	551	-	472	419	88	3,540	2,292	63	1,958	82
unusable		-	2	8	-	6	-	-	41	9	-	129	4	5	2
UNIV.	PUB I	2	2	100	-	5	-	4	4	100	30	15	50	2	100
	PUB II	25	19	76	-	65	-	50	62	124	375	231	70	22	88
	PUB III	30	25	83	-	120	-	60	58	87	450	351	68	27	90
	PRI I	5	5	100	-	7	-	8	9	113	60	53	88	5	100
	PRI II	7	2	29	-	9	-	14	8	57	105	36	34	4	57
	PRI III	4	3	75	-	4	-	8	5	63	60	17	28	3	75
COMP. COLL.	PUB I	7	5	71	-	14	-	14	12	86	105	27	26	5	71
	PUB II	79	48	60	-	190	-	158	114	-	1,185	798	62	69	77
	PUB III	19	12	63	-	42	-	39	34	89	285	181	64	16	84
	PRI I	8	5	63	-	6	-	14	6	43	105	31	30	5	63
	PRI II	12	9	53	-	33	-	34	21	62	255	143	56	13	76
ECON. ARTS	PUB I	2	1	50	-	1	-	4	1	25	30	8	27	1	50
	PUB II	5	2	40	-	2	-	10	6	60	75	42	56	3	60
	PRI I	22	14	64	-	23	-	44	26	59	330	153	52	15	68
	PRI II	8	8	100	-	24	-	12	12	100	90	77	86	8	100

TABLE A-2

STANDARD ERRORS FOR KEY ESTIMATES BASED ON THE QUESTIONNAIRE FOR INSTITUTIONS, INCLUDING VALUES OF EACH ESTIMATE AND COEFFICIENT OF VARIATION (C.V.)

		OVERALL	PUBLIC	PRIVATE	UNIVERSITY	COMPREHENSIVE COLLEGE	LIBERAL ARTS
NUMBER RESPONDING		166	114	46	56	79	25
ENROLLMENT AY 1975-1976	ESTIMATE	485200	339309	145849	105285	300194	79[illegible]
	STD ERROR	10189	9161	7149	7265	12603	
	C.V.	0.021	0.027	0.049	0.069	0.042	
BACHELOR'S DEGREES WITH CERTIFICATE AY 1972-1973	ESTIMATE	322424	202478	119946	67264	197323	53037
	STD ERROR	10319	7694	6537	4835	4869	5309
	C.V.	0.032	0.038	0.053	0.073	0.049	0.092
BACHELOR'S DEGREES WITH CERTIFICATE AY 1973-1974	ESTIMATE	295815	190203	105232	65183	182800	47532
	STD ERROR	8865	6660	5472	4563	8957	4325
	C.V.	0.030	0.035	0.052	0.070	0.049	0.091
BACHELOR'S DEGREES WITH CERTIFICATE AY 1974-1975	ESTIMATE	250554	16[illegible]515	90009	63731	158659	36164
	STD ERROR	7[illegible]00	4977	5086	4525	7930	3265
	C.V.	0.029	0.031	0.052	0.071	0.050	0.090
TUITION AND FEES AY 1975-1976	ESTIMATE	931	592	1965	1053	746	1961
	STD ERROR	22	17	94	73	32	142
	C.V.	0.022	0.029	0.048	0.069	0.043	0.094

TABLE A-3

STANDARD ERRORS FOR KEY ESTIMATES BASED ON THE QUESTIONNAIRE FOR INSTITUTIONS, INCLUDING VALUES OF EACH ESTIMATE AND COEFFICIENT OF VARIATION (C.V.)

		OVERALL	PUBLIC	PRIVATE	UNIVERSITY	COMPREHENSIVE COLLEGE	LIBERAL ARTS
NUMBER RESPONDING		166	114	46	56	79	25
ENROLLMENT AY 1975-1976	ESTIMATE	485203	339309	145889	105285	300184	79738
	STD ERROR	10189	9161	7140	7265	12608	6618
	C.V.	0.021	0.027	0.049	0.069	0.042	0.083
BACHELOR's DEGREES WITH CERTIFICATE AY 1972-1973	ESTIMATE	322424	202478	119946	67064	197323	58037
	STD ERROR	10318	7694	6537	4895	4669	5339
	C.V.	0.032	0.038	0.053	0.073	0.049	0.092
BACHELOR's DEGREES WITH CERTIFICATE AY 1973-1974	ESTIMATE	295515	190283	105232	65183	182800	47532
	STD ERROR	8865	6650	5472	4563	8957	4325
	C.V.	0.030	0.035	0.052	0.070	0.049	0.091
BACHELOR's DEGREES WITH CERTIFICATE 1974-1975	ESTIMATE	256554	160545	98009	63731	158659	36164
	STD ERROR	7408	4977	5096	4525	7933	3255
	C.V.	0.029	0.031	0.052	0.071	0.050	0.090
TUITION AND FEES AY 1975-1976	ESTIMATE	981	592	1965	1058	746	1961
	STD ERROR	22	17	94	73	32	142
	C.V.	0.022	0.029	0.048	0.069	0.043	0.084

TABLE A-4

STANDARD ERRORS FOR KEY ESTIMATES BASED ON THE QUESTIONNAIRE FOR STUDENTS, INCLUDING THE VALUES OF EACH ESTIMATE AND COEFFICIENT OF VARIATION (C.V.)

		OVERALL	PUBLIC	PRIVATE	UNIVERSITY	COMPRE-HENSIVE COLLEGE	LIBERAL ARTS
ALL FIELDS COMBINED	n	2163	1662	501	703	1180	280
	ESTIMATE	226500	161375	65125	69003	123666	33831
	STD ERROR	4304	3874	2993	2412	3586	2508
	C.V.	0.019	0.024	0.046	0.035	0.029	0.074
ELEMENTARY EDUCATION	n	693	520	173	223	367	103
	ESTIMATE	87225	60186	27039	[illegible]	45351	14828
	STD ERROR	3066	2829	2406	2136	2449	1364
	C.V.	0.035	0.047	0.089	0.079	0.054	0.092
SECONDARY EDUCATION	n	645	506	139	209	361	75
	ESTIMATE	79635	59726	19909	21131	46188	9556
	STD ERROR	3265	2867	1732	1364	2494	1070
	C.V.	0.041	0.048	0.087	0.078	0.054	0.112
SPECIAL EDUCATION	n	396	319	77	115	228	53
	ESTIMATE	21925	16941	10334	8197	13369	5706
	STD ERROR	3265	1000	1133	746	1063	700
	C.V.	0.051	0.059	0.112	0.091	0.079	0.122
SUBJECT MATTER SPECIALIST	n	223	161	60	73	116	33
	ESTIMATE	20397	15093	5304	5711	12238	2512
	STD ERROR	2121	1766	695	737	1456	354
	C.V.	0.104	0.117	0.131	0.129	0.119	0.141
OCCUPATIONAL VOCATIONAL EDUCATION	n	102	95	6	38	57	7
	ESTIMATE	[illegible]	4333	536	2106	2196	487
	STD ERROR	[illegible]	429	111	260	223	103
	C.V.	[illegible]	0.099	0.213	0.119	0.104	0.212
[illegible] SUPPORT PERSONNEL	n	[illegible]	[illegible]	24	31	[illegible]	12
	ESTIMATE	[illegible]	[illegible]	1903	1974	[illegible]	775
	STD ERROR	653	520	365	342	563	156
	C.V.	[illegible]	[illegible]	0.192	0.173	0.131	[illegible]

TABLE A-5

STANDARD ERRORS FOR PERCENTAGES BASED ON DATA FROM THE QUESTIONNAIRE FOR STUDENTS

EXAMPLE OF BASE	BASE	2% or 98%	5% or 95%	10% or 90%	25% or 75%	50%
OVERALL	2163	0.30	0.47	0.65	0.93	1.08
CURRENT INSTITUTIONS						
Public	1162	0.34	0.53	0.74	1.06	1.23
Private	501	0.63	0.97	1.34	1.94	2.24
University	703	0.53	0.82	1.13	1.63	1.89
Comprehensive College	1130	0.41	0.63	0.87	1.26	1.46
Liberal Arts	280	0.84	1.30	1.79	2.59	2
ETHNIC BACKGROUND						
White	1886	0.32	0.50	0.69	1.00	1.15
Black	170	1.08	1.68	2.30	3.33	3.84
Asian	27	2.75	4.27	5.88	8.49	9.81
Hispanic	25	2.86	4.44	6.12	8.84	10.21
American Indian	16	3.61	5.45	7.74	11.18	12.91
FATHER OCCUPATION GROUP						
Farm	135	1.21	1.87	2.59	3.73	4.32
Labor, Operative, Service	317	0.79	1.23	1.69	2.44	2.81
Crafts, Protective, Technical	350	0.75	1.17	1.60	2.31	2.68
Clerical, Sales	179	1.05	1.63	2.24	3.25	4.40
Professional	414	0.68	1.07	1.47	2.13	2.46
Manager, Proprietor	400	0.64	1.00	1.37	1.98	2.28

TABLE A-6

STANDARD ERRORS FOR PERCENTAGES BASED ON DATA FROM THE QUESTIONNAIRE FOR INDIVIDUAL TEACHER PREPARATION PROGRAMS

EXAMPLE OF BASE	BASE	2% or 98%	5% or 95%	10% or 90%	25% or 75%	50%
OVERALL	505	0.62	0.97	1.33	1.93	2.22
TYPE OF PROGRAM						
Elementary	118	1.29	2.01	2.77	4.00	4.
Secondary	140	1.18	1.85	2.54	3.67	4.
Special Education	66	1.74	2.70	3.72	5.37	6.20
Occupational/ Vocational	60	1.82	2.84	3.87	5.64	6.31
Subject Specialists	87	1.51	2.35	3.23	4.67	5.39
School Service	35	2.40	3.74	5.14	7.42	8.57

APPENDIX B

SUPPORTING TABLES FOR CHARTS USED IN THE TEXT

INDEX

TABLE B-1. SUPPLY AND DEMAND FOR BEGINNING TEACHERS, AGGREGATE UNITED STATES AY 1961 THROUGH 1976.

YEAR	SUPPLY OF BEGINNING TEACHERS	ESTIMATED NUMBER OF PERSONS SEEKING WORK[1]	DEMAND FOR TEACHERS
1961	140,000	103,300	140,000[5]
1962	150,000	110,700	148,000
1963	151,000	111,400	168,000
1964	175,000	129,150	169,000
1965	196,000	144,600	167,000
1966	201,000	148,300	188,000
1967	245,000	180,800	184,000
1968	249,000	183,800	216,000
1969	275,000	203,000	216,000
1970	292,000	215,000	166,000
1971[2]	309,000	228,000	142,000
1972[3]	320,000	236,200	175,000
1973	322,000	237,600	168,000
1974	305,000	225,000	151,000
1975	259,000	191,000	176,000
1976[4]	227,000	167,500	144,000

1/ ESTIMATED BY USING THE PERCENT OF GRADUATES REPORTING THAT THEY WOULD SEEK WORK AS A TEACHER. SEE TABLE B-21.

2/ SUPPLY DATA FOR 1961-1971 PROVIDED BY DR. WILLIAM GRAYBEAL OF THE NATIONAL EDUCATION ASSOCIATION.

3/ SUPPLY DATA FOR 1972-1975 ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 240 SCHOOLS, COLLEGES, AND DEPARTMENTS OF EDUCATION.

4/ SUPPLY DATA FOR 1976 ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

5/ DEMAND FIGURES FOR 1961-1976 WERE SUPPLIED BY DR. MARK BORINSKY OF THE NATIONAL CENTER FOR EDUCATION STATISTICS AND INCLUDE DEMAND FROM BOTH PUBLIC AND PRIVATE SCHOOLS.

TABLE B-2. SUPPLY OF PERSONS WITH INITIAL TEACHING CERTIFICATES BY FIELD OF SPECIALIZATION. AGGREGATE UNITED STATES AY 1972-1976.

FIELD OF SPECIALIZATION	AY 1972-1973	AY 1973-1974	AY 1974-1975	AY 1975-1976
ALL FIELDS COMBINED	322,268	304,826	258,554	226,500
ELEMENTARY	120,655	116,105	94,375	[illegible]
SECONDARY	138,269	126,146	103,509	79,635
SPECIAL EDUCATION	21,253	23,341	23,563	27,325
SUBJECT MATTER SPECIALISTS 1/	25,254	24,504	22,933	20,329
OCCUPATIONAL/ VOCATIONAL	14,996	12,608	11,709	4,869
SCHOOL SUPPORT 2/	1,841	2,122	2,465	7,049

1/ INCLUDES: PERSONS TRAINED IN PHYSICAL EDUCATION AT ALL GRADE LEVELS, FINE ARTS (MUSIC, ART, DRAMA), DRIVING AND SAFETY, LEISURE AND RECREATION AND REMEDIATION SPECIALISTS IN READING AND MATHEMATICS.

2/ INCLUDES: EDUCATION PERSONNEL SPECIALISTS (GUIDANCE), SCHOOL PSYCHOLOGY, EDUCATIONAL INFORMATION SERVICES (LIBRARY).

NOTE: AY 1972-1975 DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON APPLICATIONS FOR CERTIFICATION AT A NATIONWIDE PROBABILITY SAMPLE OF 240 INSTITUTIONS WHICH PREPARE TEACHERS.

AY 1975-1976 DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON THE REPORTS OF A NATIONWIDE PROBABILITY SAMPLE OF 3600 STUDENTS.

TABLE B-3. DISTRIBUTION OF GRADUATES WITH INITIAL TEACHING CERTIFICATES BY TYPE AND CONTROL OF INSTITUTION. AGGREGATE UNITED STATES AY 1972-1976.

	1971-1973	1973-1974	1974-1975	1975-1976
ALL INSTITUTIONS COMBINED	322,424	304,826	258,554	226,500
ALL PUBLIC INSTITUTIONS	202,478	196,278	160,545	161,375
ALL PRIVATE INSTITUTIONS	119,946	108,548	98,009	65,125
ALL UNIVERSITIES	67,064	67,237	63,731	69,003
ALL COMPREHENSIVE COLLEGES	197,323	188,560	158,659	123,666
ALL LIBERAL ARTS COLLEGES	58,037	49,029	36,164	33,831

NOTE: FIGURES FOR AY 1972-1975 ARE WEIGHTED NATIONAL ESTIMATES BASED ON COUNTS OF APPLICATIONS FOR CERTIFICATES AT A NATIONWIDE SAMPLE OF 240 INSTITUTIONS WHICH PREPARE TEACHERS.

FIGURES FOR AY 1975-1976 ARE WEIGHTED NATIONAL ESTIMATES BASED ON THE RESPONSES OF A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-4. ANALYSIS OF RECENT TEACHER EDUCATION GRADUATES BY ETHNIC BACKGROUND AND AREA OF SPECIALIZATION. AGGREGATE UNITED STATES, AY 1975-1976.

ETHNIC BACKGROUND	TOTAL PERSONS (AND PERCENT OF TOTAL)		ELEMENTARY EDUCATION	SECONDARY EDUCATION	SPECIAL EDUCATION	SUBJECT MATTER SPECIALIST	OCCUPATIONAL/ VOCATIONAL	SCHOOL SUPPORT
BLACK	16,988	PGIS[1]	33.7	18.0	9.0	24.9	8.3	6.2
	(7.5)	GAPOS[2]	8.3	6.5	5.8	9.4	12.1	9.1
WHITE	199,094	PGIS	33.0	22.8	12.8	20.7	5.2	5.5
	(87.9)	GAPOS	88.2	90.1	89.9	85.0	83.9	87.5
ASIAN	2,039	PGIS	28.0	19.7	14.7	24.6	6.5	6.5
	(0.9)	GAPOS	1.2	1.2	1.6	1.6	1.6	1.6
HISPANIC	4,077	PGIS	27.0	28.6	3.9	16.7	15.4	8.
	(1.8)	GAPOS	1.7	1.6	0.2	0.6	2.3	1.2
AMERICAN INDIAN OR ALASKAN NATIVE	1,133	PGIS	53.2	24.5	11.1	0	0	10.9
	(0.5)	GAPOS	0.5	0.3	0.2	0	0	0.6
OTHER	3,169	PGIS	26.1	11.2	16.6	45.9	0	0
	(1.4)	GAPOS	1.2	0.7	2.1	3.4	0	0

1/ PGIS: PERCENT OF GROUP IN SPECIALTY

2/ GAPOS: GROUP AS PERCENT OF SPECIALTY

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONAL PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-5. DISTRIBUTION OF MINORITY AND NON-MINORITY TEACHER EDUCATION GRADUATES BY TYPE OF INSTITUTION. AGGREGATE UNITED STATES, AY 1975-1976.

INSTITUTION TYPE AND CONTROL	ALL ETHNIC BACKGROUNDS COMBINED		NON-MINORITY ETHNIC BACKGROUND		MINORITY[1] ETHNIC BACKGROUND	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
ALL INSTITUTIONS COMBINED	226,500	100.0	199,094	100.0	27,406	100.0
PUBLIC INSTITUTIONS	161,375	71.2	138,558	69.6	22,817	83.3
UNIVERSITIES	54,027	23.9	50,239	25.2	3,788	13.8
COMPREHENSIVE COLLEGES	100,330	44.3	82,123	41.2	18,207	66.4
LIBERAL ARTS COLLEGES	7,018	3.1	6,196	3.1	822	3.0
PRIVATE INSTITUTIONS	65,125	28.8	60,536	30.4	4,589	16.7
UNIVERSITIES	14,976	6.6	14,104	7.1	872	3.2
COMPREHENSIVE COLLEGES	23,336	10.3	21,811	11.0	1,525	5.6
LIBERAL ARTS COLLEGES	26,813	11.8	24,621	12.4	2,192	8.0

1/ INCLUDES 'BLACK', 'ASIAN', 'HISPANIC', 'AMERICAN INDIAN', OR 'ALASKAN NATIVE' AND 'OTHER' CATEGORIES.

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-6. FACULTY PERCEPTIONS OF THE SUPPLY AND DEMAND FOR BEGINNING TEACHERS. AGGREGATE UNITED STATES, FALL 1977.

FIELD OF TRAINING	PERCENT REPORTING SUPPLY GREATER THAN 20% LESS THAN DEMAND	PERCENT REPORTING SUPPLY 5-20% LESS THAN DEMAND	PERCENT REPORTING SUPPLY WITHIN 5% OF DEMAND	PERCENT REPORTING SUPPLY 5-20% MORE THAN DEMAND	PERCENT REPORTING SUPPLY GREATER THAN 20% MORE THAN DEMAND
ELEMENTARY	0%	3%	22%	39%	36%
SECONDARY	0	2	20	34	44
SPECIAL EDUCATION	14	34	37	13	2
OCCUPATIONAL/VOCATIONAL	12	29	49	7	3
SCHOOL SUPPORT	2	7	73	11	7
BILINGUAL EDUCATION	13	26	55	4	2
EARLY CHILDHOOD	5	35	40	12	8
INDIAN EDUCATION	22	20	55	0	3
URBAN EDUCATION	14	25	43	11	7

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONAL PROBABILITY SAMPLE OF 480 FULL-TIME TEACHER EDUCATION FACULTY. A LIKERT-TYPE SCALE WAS USED TO COLLECT THE DATA REPORTED IN THIS TABLE.

TABLE B-7. METHOD USED TO DETERMINE SIZE OF TEACHER PREPARATION PROGRAM AND NUMBER OF GRADUATES FROM PROGRAMS BY FIELD OF SPECIALIZATION, AGGREGATE UNITED STATES, AY 1975-1976.

FIELD OF TRAINING		TOTAL GRADUATES AY 1975-1976	METHOD USED TO DETERMINE SIZE OF PROGRAM					
			STUDENT DECISIONS 1/	ANALYTIC 2/	COOPERATIVE 3/	ECONOMIC 4/	OUTSIDE AUTHORITY 5/	OTHER
ALL FIELDS COMBINED	(PCT OF PROGRAMS USING METHOD	100.0	44.7	18.2	17.3	10.1	4.0	5.8
	(NO GRADUATES AY 1975-1976	226,500	136,210	27,231	27,100	17,204	6,233	12,522
	(PCT TOTAL GRADUATES BY METHOD	100.0	60.1	12.0	11.9	7.6	2.8	5.5
ELEMENTARY EDUCATION	(PCT OF PROGRAMS USING METHOD	100.0	45.8	19.0	14.3	11.3	2.7	6.8
	(NO GRADUATES AY 1975-1976	87,225	53,056	9,944	8,107	6,406	1,766	7,946
	(PCT TOTAL GRADUATES BY METHOD	100.0	60.8	11.4	9.3	7.3	2.0	9.1
SECONDARY EDUCATION	(PCT OF PROGRAMS USING METHOD	100.0	50.8	14.9	12.3	12.2	3.9	5.8
	(NO GRADUATES AY 1975-1976	79,635	52,264	8,306	6,857	6,801	2,174	3,233
	(PCT TOTAL GRADUATES BY METHOD	100.0	65.6	10.4	8.6	8.5	2.7	4.1
SPECIAL EDUCATION	(PCT OF PROGRAMS USING METHOD	100.0	31.8	24.0	27.1	7.5	7.3	2.3
	(NO GRADUATES AY 1975-1976	27,325	10,533	5,9[illegible]	6,665	1,844	1,796	565
	(PCT TOTAL GRADUATES BY METHOD	100.0	38.6	21.5	24.3	6.7	6.6	2.1
OCCUPATIONAL VOCATIONAL EDUCATION	(PCT OF PROGRAMS USING METHOD	100.0	49.1	10.7	26.2	10.4	1.5	2.2
	(NO GRADUATES AY 1975-1976	4,869	2,846	417	1,021	405	73	107
	(PCT TOTAL GRADUATES BY METHOD	100.0	58.5	8.6	21.0	8.3	1.5	2.2
SUBJECT MATTER SPECIALISTS	(PCT OF PROGRAMS USING METHOD	100.0	56.8	12.1	16.9	8.2	1.5	4.3
	(NO GRADUATES AY 1975-1976	20,397	14,243	1,742	2,413	1,171	214	614
	(PCT TOTAL GRADUATES BY METHOD	100.0	69.8	8.5	11.8	5.7	1.4	3.0
SCHOOL SUPPORT	(PCT OF PROGRAMS USING METHOD	100.0	39.9	14.5	32.1	9.1	3.3	0.9
	(NO GRADUATES AY 1975-1976	7,049	3,248	920	2,037	577	210	57
	(PCT TOTAL GRADUATES BY METHOD	100.0	46.1	13.1	28.9	8.2	3.0	0.8

1/ PROGRAM SIZE IS DETERMINED BY STUDENT DECISIONS TO ENTER TRAINING

2/ PROGRAM SIZE IS BASED ON STUDIES OF DEMAND FOR TEACHERS EITHER DIRECTLY THROUGH THE EMPLOYMENT RATE OR INDIRECTLY THROUGH ANALYSIS OF BIRTH RATE.

3/ PROGRAM SIZE IS BASED ON COOPERATIVE PLANNING WITH EITHER STATE OR LOCAL EDUCATION AGENCIES

4/ PROGRAM SIZE IS BASED ON A FIXED AMOUNT OF RESOURCES AVAILABLE TO THE EDUCATION UNIT

5/ PROGRAM SIZE IS MANDATED BY AUTHORITY OUTSIDE THE EDUCATION UNIT

NOTE: BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 505 INDIVIDUAL TEACHER PREPARATION PROGRAMS.

TABLE B-8. ENROLLMENT TRENDS IN PROGRAMS OF TEACHER EDUCATION BY AREA OF SPECIALIZATION. AGGREGATE UNITED STATES, AY 1975-1976.

FIELD OF TRAINING	ENROLLMENT WILL INCREASE MORE THAN 20 PERCENT	ENROLLMENT WILL INCREASE BETWEEN 5 AND 20 PERCENT	ENROLLMENT WILL REMAIN WITHIN 5% OF CURRENT LEVELS	ENROLLMENT WILL DECREASE BETWEEN 5 AND 20 PERCENT	ENROLLMENT WILL DECREASE MORE THAN 20 PERCENT	PROGRAM WILL BE ELIMINATED AT THE INSTITUTION
ELEMENTARY EDUCATION	0.9	14.9	52.0	26.7	5.5	–
SECONDARY EDUCATION	0	9.1	52.5	32.4	5.5	0.6
SPECIAL EDUCATION	18.0	53.8	16.4	8.9	2.8	–
OCCUPATIONAL/VOCATIONAL	11.1	38.7	49.0	0.7	0.5	–
SCHOOL SUPPORT	0	40.6	51.1	7.8	0.5	–
BILINGUAL EDUCATION	27.5	56.0	15.9	0	0.6	–
EARLY CHILDHOOD	10.5	43.8	42.3	3.1	0.2	–
INDIAN EDUCATION	3.6	54.5	40.9	0	0.9	–
SPECIAL APPROACHES TO URBAN EDUCATION	0.6	47.3	49.5	1.9	0.6	–

NOTE: DATA ARE WEIGHTED, NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 240 DEANS AND DEPARTMENT CHAIRPERSONS. A FIVE-POINT LIBERT SCALE WAS USED; TABLE ENTRIES REPRESENT THE RESPONSE IN EACH OF THESE CATEGORIES. A SEPARATE OPTION WAS AVAILABLE FOR THE RESPONDENT TO INDICATE THE POSSIBILITY THAT THE PROGRAM MIGHT BE ELIMINATED AT HIS/HER INSTITUTION.

TABLE B-9. DISTRIBUTION OF RECENT TEACHER EDUCATION GRADUATES BY GEOGRAPHIC BACKGROUND, MARITAL STATUS, NUMBER OF DEPENDENTS, AND AGE. AGGREGATE UNITED STATES, AY 1975-1976.

	NUMBER	PERCENT
TOTAL	226,500	100
GEOGRAPHIC BACKGROUND		
CITY OF OVER 1,000,000 POPULATION	16,761	7.4
SUBURB OF A CITY OF OVER 1,000,000 POPULATION	20,838	9.2
CITY WITH POPULATION BETWEEN 500,000 AND 999,999	21,971	9.7
CITY WITH POPULATION BETWEEN 100,000 AND 499,999	31,257	13.8
CITY WITH POPULATION LESS THAN 100,000	70,442	31.1
RURAL	62,740	27.7
FOREIGN COUNTRY	2,491	1.1
MARITAL STATUS		
SINGLE	152,435	67.3
MARRIED	68,630	30.3
OTHER	5,435	2.4
NUMBER OF DEPENDENTS		
NONE	188,222	83.1
ONE	16,308	7.2
TWO	13,364	5.9
THREE OR MORE	8,606	3.8
AGE		
18 OR YOUNGER	0	0
19	1,133	0.5
20	12,005	5.3
21	88,335	39.0
22	46,206	20.4
23	21,291	9.4
24 OR OLDER	57,530	25.4

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-10. LINGUISTIC SKILLS OF RECENT TEACHER EDUCATION GRADUATES BY LANGUAGE. AGGREGATE UNITED STATES, AY 1975-1976.

SELF-REPORTS OF HIGHEST LINGUISTIC SKILL LEVEL RELATIVE TO TEACHING	SPANISH		FRENCH		ALL OTHER FOREIGN LANGUAGES	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
NO SKILL IN TEACHING	197,284	87.1	200,312	88.4	211,557	93.4
NON-TEACHING ACQUAINTANCE WITH LANGUAGE	21,371	9.4	19,033	8.4	11,925	5.3
COULD TEACH THE LANGUAGE AS A FOREIGN LANGUAGE	6,143	2.7	6,072	2.7	2,229	1.0
COULD TEACH THE GRAMMAR AND LANGUAGE ARTS OF THE LANGUAGE	1,002	0.4	863	0.4	171	0.1
COULD TEACH SUBJECT AREAS IN THE LANGUAGE	700	0.3	219	0.1	618	0.3

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-11. VALUES OF RECENT TEACHER EDUCATION GRADUATES IN AREAS RELATED TO JOB-SATISFACTION. AGGREGATE UNITED STATES, AY 1975-1976.

FACTORS	PERCENT OF RESPONDENTS CITING FACTOR AS 'VERY IMPORTANT' IN WORK SITUATION	PERCENT OF RESPONDENTS CITING FACTOR AS 'MODERATELY IMPORTANT' IN WORK SITUATION	PERCENT OF RESPONDENTS CITING FACTOR AS 'NOT IMPORTANT' IN WORK SITUATION
GOOD INCOME	35.1	61.0	3.9
JOB SECURITY	57.8	39.4	2.8
OPPORTUNITY FOR PROMOTION	35.6	47.2	17.2
FREEDOM IN DECISION-MAKING	71.8	26.5	1.6
SOCIAL WORTH OF JOB	92.2	6.6	1.2
CHALLENGE OF JOB	88.2	10.7	1.1
CONFIDENCE IN ABILITY TO DO JOB	93.8	5.2	1.0
WORK IN AREA OF COLLEGE TRAINING	78.0	19.3	2.7
FLEXIBLE HOURS	23.9	57.3	18.8
FRIENDLY, LIKABLE CO-WORKERS	65.0	32.6	2.4
FREEDOM FROM PRESSURE	17.5	56.2	26.3
BENIGN SUPERVISOR	53.9	40.9	5.2
POWER	8.2	27.8	64.0
EXCITING JOB	49.5	41.6	8.9
STATUS	9.7	38.6	51.6
CONVENIENT TRAVEL TO & FROM HOME	32.9	53.9	13.2
CLEAR JOB DESCRIPTION	43.2	42.2	14.6
COORDINATION OF JOB WITH CHILDREN'S SCHEDULE	40.8	29.0	30.1

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-12: EFFECT OF AVAILABILITY OF DESIRED PROGRAMS AS A FACTOR IN THE DECISION OF RECENT TEACHER EDUCATION GRADUATES TO ATTEND THEIR CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. AGGREGATE UNITED STATES, AY 1975-1976.

	VERY IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT
ALL GROUPS COMBINED	69.6	27.1	3.3
FATHER OCCUPATION GROUP			
FARM	68.4	30.0	1.6
LABOR, OPERATIVE, SERVICE	65.3	32.6	2.1
CRAFTS, PROTECTIVE SERVICE, TECHNICAL,	73.9	22.7	3.5
CLERICAL-SALES	65.6	27.4	7.0
MANAGERIAL, PROPRIETOR	69.3	28.0	2.6
PROFESSIONAL	71.1	24.9	3.9
ETHNIC BACKGROUND			
WHITE	69.4	27.0	3.6
BLACK	79.9	16.9	3.2
ASIAN	60.9	23.1	16.0
HISPANIC	59.1	33.6	7.3
AMERICAN INDIAN	60.2	39.7	-

TABLE B-13: EFFECT OF INSTITUTIONAL REPUTATION AS A FACTOR IN THE DECISION OF RECENT TEACHER EDUCATION GRADUATES TO ATTEND THEIR CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. AGGREGATE UNITED STATES, AY 1975-1976.

	VERY IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT
ALL GROUPS COMBINED	40.9	49.2	22.0
FATHER OCCUPATION GROUP			
FARM	31.5	56.4	12.1
LABOR, OPERATIVE, SERVICE	37.8	51.7	10.5
CRAFTS, PROTECTIVE SERVICE, TECHNICAL,	42.1	48.9	9.0
CLERICAL-SALES	33.0	51.9	15.1
MANAGERIAL, PROPRIETOR	42.3	49.8	7.9
PROFESSIONAL	44.4	45.1	10.5
ETHNIC BACKGROUND			
WHITE	41.9	48.6	9.5
BLACK	47.1	40.5	12.4
ASIAN	25.2	55.2	19.6
HISPANIC	18.3	53.4	28.3
AMERICAN INDIAN	47.3	38.0	14.8

TABLE B-14: EFFECT OF LIKELIHOOD OF GETTING A GOOD JOB AFTER GRADUATION AS A FACTOR IN THE DECISION OF RECENT TEACHER EDUCATION GRADUATES TO ATTEND THEIR CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. AGGREGATE UNITED STATES, AY 1975-1976.

	VERY IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT
ALL GROUPS COMBINED	47.4	34.7	17.9
FATHER OCCUPATION GROUP			
FARM	47.2	38.5	14.3
LABOR, OPERATIVE, SERVICE	46.4	37.4	16.2
CRAFTS, PROTECTIVE SERVICE, TECHNICAL,	45.8	35.9	18.3
CLERICAL-SALES	41.7	37.8	20.5
MANAGERIAL, PROPRIETOR	48.4	34.3	17.3
PROFESSIONAL	49.8	30.7	29.4
ETHNIC BACKGROUND			
WHITE	46.4	35.5	18.1
BLACK	58.3	25.4	16.3
ASIAN	34.1	45.2	20.8
HISPANIC	49.4	21.2	29.3
AMERICAN INDIAN	38.1	61.9	

TABLE B-15: EFFECT OF CONVENIENCE TO HOME AS A FACTOR IN THE DECISION OF RECENT TEACHER EDUCATION GRADUATES TO ATTEND THEIR CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. AGGREGATE UNITED STATES, AY 1975-1976.

	VERY IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT
ALL GROUPS COMBINED	41.6	33.9	24.5
FATHER OCCUPATION GROUP			
FARM	40.8	33.8	25.4
LABOR, OPERATIVE, SERVICE	44.5	31.2	24.3
CRAFTS, PROTECTIVE SERVICE, TECHNICAL,	43.7	32.8	23.5
CLERICAL-SALES	49.0	26.2	24.8
MANAGERIAL, PROPRIETOR	37.3	38.9	23.7
PROFESSIONAL	40.7	33.3	25.9
ETHNIC BACKGROUND			
WHITE	40.2	35.5	24.3
BLACK	49.1	25.9	25.1
ASIAN	55.2	11.9	32.9
HISPANIC	77.9	22.1	-
AMERICAN INDIAN	47.2	25.0	27.8

TABLE B-16: EFFECT OF PARENT OPTIONS AS A FACTOR IN THE DECISION OF RECENT TEACHER EDUCATION GRADUATES TO ATTEND THEIR CURRENT INSTITUTION; BY FATHER OCCUPATION GROUP AND ETHNIC BACKGROUND. AGGREGATE UNITED STATES, AY 1975-1976.

	VERY IMPORTANT	MODERATELY IMPORTANT	NOT IMPORTANT
ALL GROUPS COMBINED	20.9	42.1	37.0
FATHER OCCUPATION GROUP			
FARM	14.0	32.7	53.3
LABOR, OPERATIVE, SERVICE	20.2	42.8	37.0
CRAFTS, PROTECTIVE SERVICE, TECHNICAL,	19.7	42.3	38.0
CLERICAL-SALES	22.9	40.8	36.2
MANAGERIAL, PROPRIETOR	20.1	45.0	34.9
PROFESSIONAL	23.7	39.7	36.6
ETHNIC BACKGROUND			
WHITE	20.7	43.2	36.1
BLACK	14.7	43.3	42.0
ASIAN	32.2	23.1	44.7
HISPANIC	7.3	47.2	45.5
AMERICAN INDIAN	72.2	-	27.8

TABLE B-17. ATTENDANCE AT INSTITUTIONS PRIOR TO CURRENT INSTITUTION AS REPORTED BY RECENT TEACHER EDUCATION GRADUATES. AGGREGATE UNITED STATES, AY 1975-1976.

TYPE OF PREVIOUS INSTITUTION	NUMBER	PERCENT
NO PRIOR INSTITUTIONS	129,558	57.2
AT LEAST ONE OTHER FOUR-YEAR INSTITUTION	46,889	20.7
A TWO-YEAR INSTITUTION	49,603	21.9

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-18. FACTORS INFLUENCING TEACHER EDUCATION STUDENTS TO SEEK A CAREER IN TEACHING. AGGREGATE UNITED STATES, AY 1975-1976.

FACTORS	PERCENT REPORTING THAT FACTOR ENCOURAGED TEACHING AS A CAREER	PERCENT REPORTING NEGLIGIBLE EFFECT	PERCENT REPORTING THAT FACTOR DISCOURAGED TEACHING AS A CAREER
TEACHING SALARIES	12.2	64.4	23.3
JOB SECURITY IN TEACHING	38.5	45.8	15.7
STATUS OF THE TEACHING PROFESSION	35.1	51.1	13.7
DESIRE TO WORK WITH CHILDREN	92.3	6.5	1.3
INFLUENCES OF PARENTS AND FAMILY	38.1	55.9	6.0
INFLUENCES OF HIGH SCHOOL TEACHERS	39.8	54.4	5.7
INFLUENCES OF ARTS & SCIENCES PROFESSORS	20.1	73.4	6.5
INFLUENCES OF EDUCATION UNIT PROFESSORS	45.9	47.6	6.5
PROSPECTS OF OBTAINING A JOB AS A TEACHER	29.4	31.7	38.9

NOTE: A 3-POINT LIKERT-TYPE SCALE WAS USED TO OBTAIN RESPONSE. BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-19. TIMING OF CAREER COUNSELING PROVIDED TO PERSONS PREPARING TO BE TEACHERS, AGGREGATE UNITED STATES, AY 1975-1976.

TYPE AND CONTROL OF INSTITUTIONS		TOTAL PREPARING TO BE TEACHERS	TIMING OF CAREER COUNSELING: AT ENTRY TO INSTITUTION	AT ENTRY TO TEACHER PREPARATION	PRIOR TO STUDENT TEACHING	IN FINAL YEAR	NO CAREER COUNSELLING
ALL INSTITUTIONS COMBINED	(NUMBER	226,500	15,737	46,760	51,003	80,461	32,539
	(PERCENT	100.0	6.9	20.6	22.5	35.5	14.4
PUBLIC INSTITUTIONS	(NUMBER	161,375	11,866	34,044	41,337	57,652	16,476
	(PERCENT	100.0	7.4	21.1	25.6	35.7	10.2
PUBLIC UNIVERSITIES	(NUMBER	54,026	3,448	9,605	10,191	18,681	12,101
	(PERCENT	100.0	6.4	17.8	18.9	34.6	22.4
PUBLIC COMPREHENSIVE COLLEGES	(NUMBER	100,330	8,112	23,403	28,726	35,795	4,294
	(PERCENT	100.0	8.1	23.3	28.6	35.7	4.3
PUBLIC LIBERAL ARTS COLLEGES	(NUMBER	7,018	306	1,036	2,420	3,176	80
	(PERCENT	100.0	4.4	14.8	34.5	45.2	1.2
PRIVATE INSTITUTIONS	(NUMBER	65,125	3,871	12,716	9,666	22,809	16,063
	(PERCENT	100.0	5.9	19.5	14.8	35.0	24.7
PRIVATE UNIVERSITIES	(NUMBER	14,976	815	2,765	2,284	4,747	4,365
	(PERCENT	100.0	5.4	18.5	15.3	31.7	29.1
PRIVATE COMPREHENSIVE COLLEGES	(NUMBER	23,336	1,209	4,550	4,141	8,941	4,495
	(PERCENT	100.0	5.2	19.5	17.7	38.3	19.3
PRIVATE LIBERAL ARTS COLLEGES	(NUMBER	26,813	1,847	5,401	3,241	9,121	7,203
	(PERCENT	100.0	6.9	20.1	12.1	34.0	26.9

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONAL PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION

TABLE B-20. PERCEPTIONS OF THE LABOR MARKET FOR TRAINED EDUCATION PERSONNEL AS REPORTED BY RECENT TEACHER EDUCATION GRADUATES. AGGREGATE UNITED STATES, AY 1975-1976.

FIELD OF TRAINING	PERCENT REPORTING THAT SUPPLY EXCEEDS DEMAND BY MORE THAN 20%	PERCENT REPORTING THAT SUPPLY EXCEEDS DEMAND BY 5-20%	PERCENT REPORTING THAT SUPPLY IS WITHIN 5% OF DEMAND	PERCENT REPORTING THAT DEMAND EXCEEDS SUPPLY BY 5-20%	PERCENT REPORTING THAT DEMAND EXCEEDS SUPPLY BY MORE THAN 20%	PERCENT WHO COULD NOT JUDGE SUPPLY/ DEMAND CONDITIONS
ELEMENTARY EDUCATION	52.6	19.2	5.0	3.3	3.6	16.3
SECONDARY EDUCATION	42.4	25.9	4.9	2.9	2.8	21.2
SPECIAL EDUCATION	7.8	14.0	20.3	22.3	11.0	24.6
SUBJECT MATTER SPECIALISTS	9.9	13.9	16.1	13.2	5.4	41.4
OCCUPATIONAL/VOCATIONAL	5.3	10.1	17.0	16.3	5.5	45.7
SCHOOL SUPPORT	3.8	6.2	9.2	5.9	3.0	71.8
BILINGUAL EDUCATION	4.0	4.2	7.2	18.4	18.0	48.3
EARLY CHILDHOOD EDUCATION	17.3	14.8	15.2	10.2	3.7	38.7

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS. A FIVE POINT LIKERT SCALE WAS USED; A SEPARATE RESPONSE OPTION WAS PROVIDED FOR THOSE PERSONS WHO COULD NOT JUDGE SUPPLY AND DEMAND CONDITIONS.

TABLE B-21: PLANS FOR WORK UPON GRADUATION AND RECEIPT OF INITIAL TEACHING CERTIFICATE AS EXPRESSED BY RECENT TEACHER EDUCATION GRADUATES, AGGREGATE UNITED STATES, AY 1975-1976.

	EMPLOYMENT AS A TEACHER	OTHER EMPLOYMENT	GRADUATE SCHOOL IN EDUCATION	GRADUATE SCHOOL OUTSIDE EDUCATION	UNDECIDED
ALL GROUPS COMBINED	66.7	5.1	14.5	5.9	5.2
FATHER OCCUPATION GROUP					
FARM	81.3	[illegible]	7.9	6.9	1.8
LABOR, OPERATIVE, SERVICE	66.1	4.6	16.9	4.9	5.1
CRAFTS, PROTECTIVE SERVICE, TECHNICAL	67.0	6.8	12.5	5.1	5.7
CLERICAL, SALES	63.5	6.5	17.3	6.2	3.3
MANAGERIAL, PROPRIETOR	67.8	4.3	16.1	4.8	4.0
PROFESSIONAL	64.4	5.1	12.7	8.3	7.4
ETHNIC BACKGROUND					
WHITE	67.7	4.8	13.9	5.8	5.5
BLACK	56.6	6.0	25.3	5.8	2.0
ASIAN	44.1	3.7	24.9	11.7	11.0
HISPANIC	84.7	-	15.2	-	-
AMERICAN INDIAN	65.4	-	-	-	34.6

NOTE: DATA ARE WEIGHTED NATIONAL ESTIMATES BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION.

TABLE B-22. INTENTIONS TO PURSUE GRADUATE TRAINING: TYPE OF DEGREE AND PART/FULL TIME ATTENDANCE STATUS BY INTENDED FIELD OF TRAINING, BASED ON A NATIONWIDE PROBABILITY SAMPLE OF 3600 PERSONS IN THEIR FINAL YEAR OF TEACHER PREPARATION, AY 1975-1976.

FIELD OF TRAINING	TOTAL	TOTAL PART TIME	TOTAL FULL TIME	MASTER'S PART TIME	MASTER'S FULL TIME	DOCTORAL PART TIME	DOCTORAL FULL TIME
ALL FIELDS COMBINED	31,633	17,762	13,871	16,908	13,607	854	264
SPECIAL EDUCATION	7,811	3,712	4,099	3,712	3,999	–	100
EARLY CHILDHOOD	3,141	1,902	1,239	1,710	1,239	192	–
OCCUPATIONAL/VOCATIONAL	1,911	1,246	665	1,246	665	–	–
BILINGUAL	874	584	290	584	290	–	–
ALL OTHER FIELDS	17,896	10,318	7,578	9,656	7,414	662	164